L10 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:431390 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 142:477067
TITLE: SiRNA's containing ribose substitutes to which lipophilic moieties may be attached
INVENTOR(S): Manoharan, Muthiah; Kesavan, Venkitasamy; Rajeev, Kallanthottathil G.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 273 pp., Cont.-in-part of Appl. No. PCT/US04/011829.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
PATENT INFORMATION:

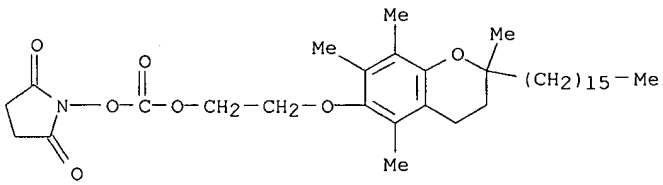
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005107325 A1		20050519	US 2004-916185	20040810
PRIORITY APPLN. INFO.:			US 2003-463772P	20030417
			US 2003-465665P	20030425
			US 2003-465802P	20030425
			US 2003-469612P	20030509
			US 2003-493986P	20030808
			US 2003-494597P	20030811
			US 2003-503414P	20030915
			US 2003-506341P	20030926
			US 2003-510246P	20031009
			US 2003-510318P	20031010
			US 2003-518453P	20031107
			WO 2004-US7070	20040308
			WO 2004-US10586	20040405
			WO 2004-US11255	20040409
			WO 2004-US11829	20040416
			WO 2004-US11822	20040416

OTHER SOURCE(S): MARPAT 142:477067

AB The invention relates to iRNA agents, which preferably include a monomer in which the ribose moiety has been replaced by a moiety other than ribose. The inclusion of such a monomer can allow for modulation of a property of the iRNA agent into which it is incorporated, e.g., by using the non-ribose moiety as a point to which a ligand or other entity, e.g., a lipophilic moiety. e.g., cholesterol, is is directly, or indirectly, tethered. The invention also relates to methods of making and using such modified iRNA agents.

IT **851912-69-1P** **851912-70-4P** **851912-71-5P** **851912-72-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(siRNA's containing ribose substitutes to which lipophilic moieties may be attached)

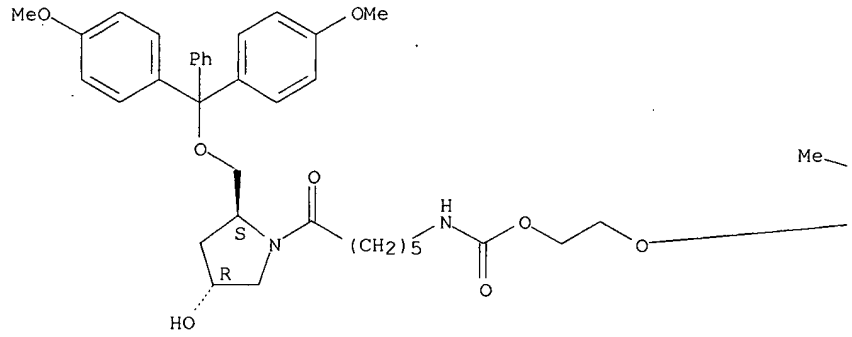
RN 851912-69-1 CAPLUS
CN 2,5-Pyrrolidinedione, 1-[[[2-[(2-hexadecyl-3,4-dihydro-2,5,7,8-tetramethyl-2H-1-benzopyran-6-yl)oxy]ethoxy]carbonyl]oxy]- (9CI) (CA INDEX NAME)



RN 851912-70-4 CAPLUS
CN Carbamic acid, [6-[(2S,4R)-2-[[bis(4-methoxyphenyl)phenylmethoxy]methyl]-4-hydroxy-1-pyrrolidinyl]-6-oxohexyl]-, 2-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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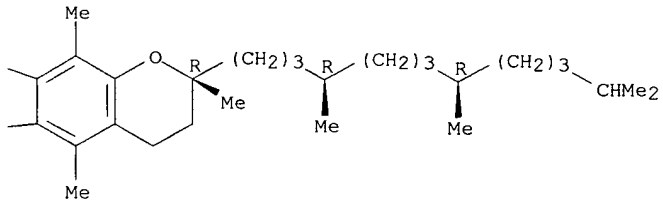
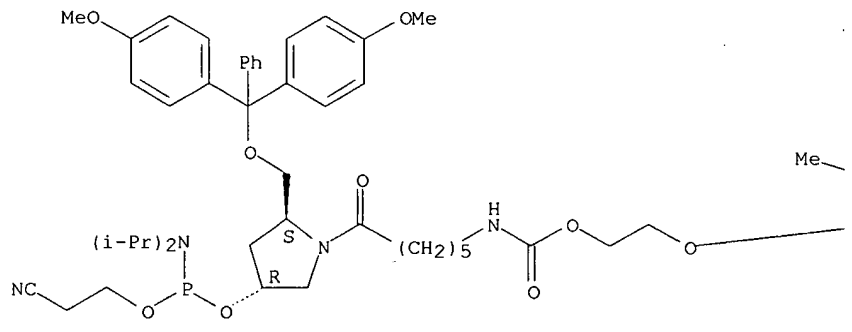


RN 851912-71-5 CAPLUS

CN Carbamic acid, [6-[(2S,4R)-2-[[bis(4-methoxyphenyl)phenylmethoxy]methyl]-4-[[[bis(1-methylethyl)amino](2-cyanoethoxy)phosphino]oxy]-1-pyrrolidinyl]-6-oxohexyl]-, 2-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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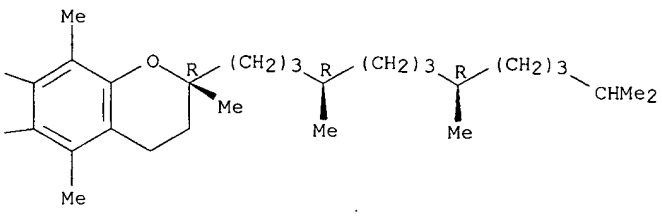
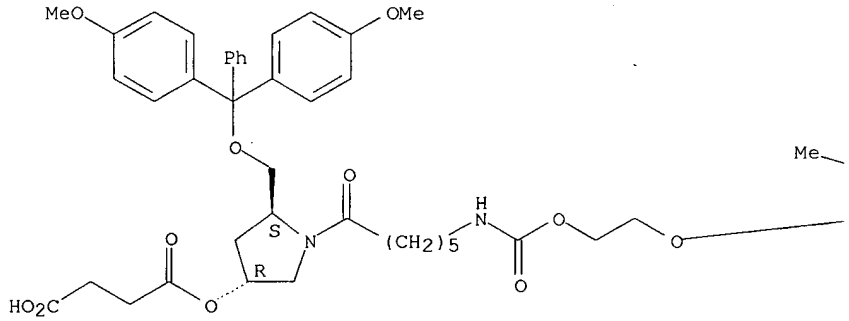


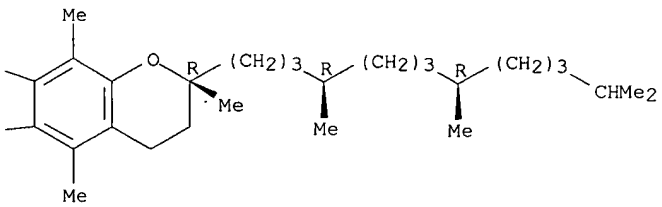
RN 851912-72-6 CAPLUS
CN Butanedioic acid, mono[(3R,5S)-5-[[bis(4-methoxyphenyl)phenylmethoxy]methyl]-1-[6-[[[2-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]ethoxy]carbonyl]amino]-1-oxohexyl]-3-pyrrolidinyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L10 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:618733 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 141:174332
TITLE: Preparation of tocopherols, tocotrienols, other chroman and side chain derivatives for therapeutic use in the prevention and treatment of **cancer**
INVENTOR(S): Sanders, Bob G.; Kline, Kimberly; Hurley, Laurence; Gardner, Robb; Menchaca, Marla; Yu, Weiping; Ramanan, Puthucode N.; Liu, Shenquan; Israel, Karen

PATENT ASSIGNEE(S): Research Development Foundation, USA
SOURCE: U.S., 48 pp., Cont.-in-part of U.S. Ser. No. 404,001.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6770672	B1	20040803	US 2000-502592	20000211
US 6417223	B1	20020709	US 1999-404001	19990923
CA 2399802	AA	20010816	CA 2001-2399802	20010209
WO 2001058889	A1	20010816	WO 2001-US4168	20010209
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1254130	A1	20021106	EP 2001-909008	20010209
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004504268	T2	20040212	JP 2001-558439	20010209
NZ 520798	A	20040528	NZ 2001-520798	20010209
CN 1529701	A	20040915	CN 2001-807536	20010209
RU 2263672	C2	20051110	RU 2002-124135	20010209
US 2002107207	A1	20020808	US 2001-8066	20011105
US 6703384	B2	20040309		
US 2004235938	A1	20041125	US 2003-644418	20030820
US 2004097431	A1	20040520	US 2003-695275	20031028

PRIORITY APPLN. INFO.:

US 1998-101543P	P	19980923
US 1999-404001	A2	19990923
US 1998-101542P	P	19980923
US 2000-502592	A	20000211
WO 2001-US4168	W	20010209
US 2001-8066	A3	20011105

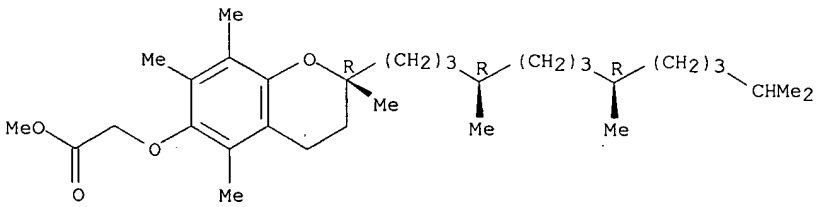
OTHER SOURCE(S): MARPAT 141:174332

AB Chroman derivs., such as I [X = O, S, NR6; Y = O, NR6; R1 = carboxyalkyl, carboxyalkenyl, etc.; R2, R3, R4 = H, Me, alkyl, etc.; R5 = alkyl, alkenyl, etc.; R6 = H, alkyl], were prepared for use in antitumor pharmaceutical compns. for inducing apoptosis in a cell, particularly a **cancer** cell. Thus, α-tocopherol derivative II was prepared in 88% yield by a reaction of BrCH2CO2Me with (R,R,R)-α-tocopherol using NaOH in DMF. The prepared chromans were assayed for growth inhibitory and apoptotic activity against a variety of human **cancer** cell lines.

IT **261929-61-7P** **261929-62-8P** **261929-77-5P** **261929-78-6P** **354526-66-2P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for therapeutic use in prevention and treatment of **cancer**)

RN 261929-61-7 CAPLUS
CN Acetic acid, [[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]-, methyl ester (9CI) (CA INDEX NAME)

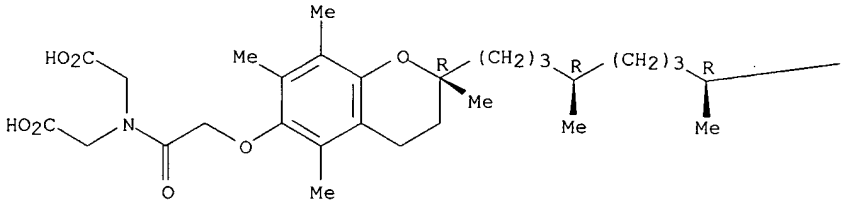
Absolute stereochemistry.



RN 261929-62-8 CAPLUS
CN Glycine, N-(carboxymethyl)-N-[[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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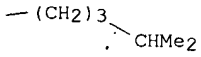
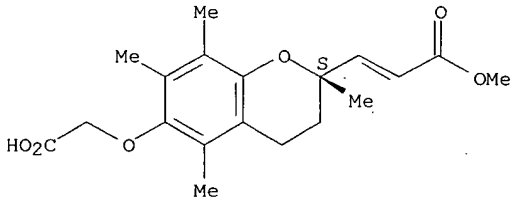


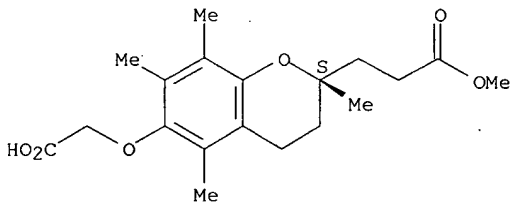
RN 261929-77-5 CAPLUS
CN 2-Propenoic acid, 3-[(2S)-6-(carboxymethoxy)-3,4-dihydro-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]-, 1-methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

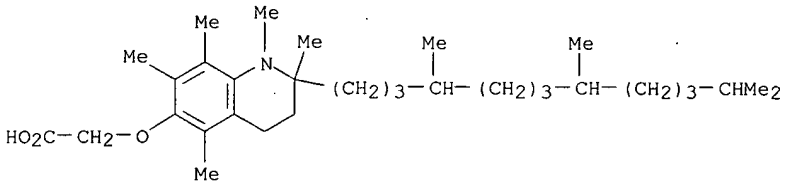


RN 261929-78-6 CAPLUS
CN 2H-1-Benzopyran-2-propanoic acid, 6-(carboxymethoxy)-3,4-dihydro-2,5,7,8-tetramethyl-, α-methyl ester, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 354526-66-2 CAPLUS
CN Acetic acid, [[1,2,3,4-tetrahydro-1,2,5,7,8-pentamethyl-2-(4,8,12-trimethyltridecyl)-6-quinolinyl]oxy]- (9CI) (CA INDEX NAME)

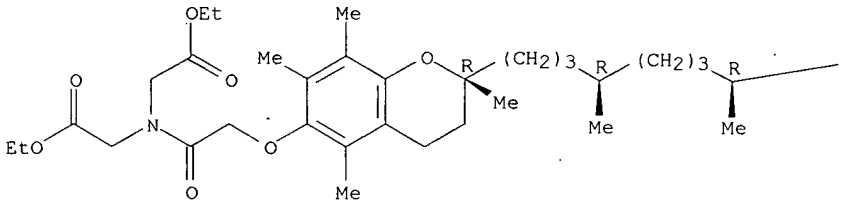


IT **261929-79-7P 261929-84-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for therapeutic use in prevention and treatment of **cancer**)

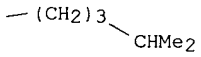
RN 261929-79-7 CAPLUS
CN Glycine, N-[[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]acetyl]-N-(2-ethoxy-2-oxoethyl)-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



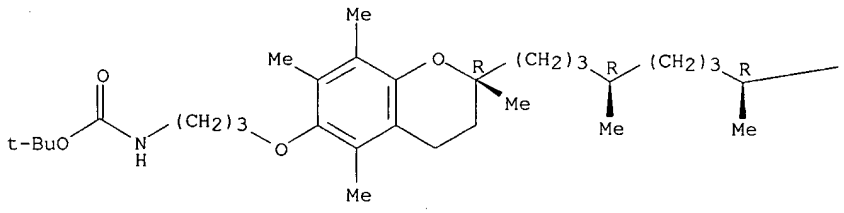
PAGE 1-B

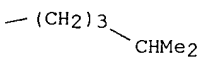


RN 261929-84-4 CAPLUS
CN Carbamic acid, [3-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

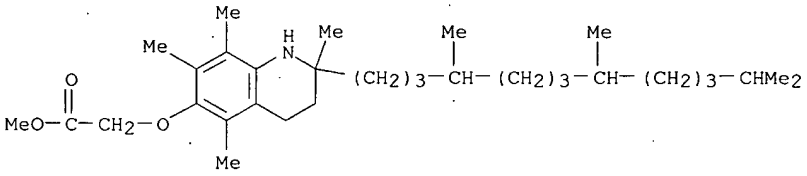
PAGE 1-A



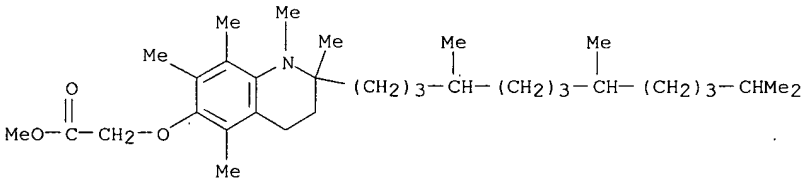


IT **354526-64-0P 354526-65-1P**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for therapeutic use in prevention and treatment of **cancer**)

RN 354526-64-0 CAPLUS
CN Acetic acid, [[1,2,3,4-tetrahydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-6-quinolinyl]oxy]-, methyl ester (9CI) (CA INDEX NAME)



RN 354526-65-1 CAPLUS
CN Acetic acid, [[1,2,3,4-tetrahydro-1,2,5,7,8-pentamethyl-2-(4,8,12-trimethyltridecyl)-6-quinolinyl]oxy]-, methyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:511122 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 139:90452
TITLE: Liposomal delivery of vitamin E based compounds
INVENTOR(S): Sanders, Bob G.; Kline, Kimberly; Lawson, Karla A.; Menchaca, Marla S.; Knight, J. Vernon; Wellen, Clyde W.
PATENT ASSIGNEE(S): Research Development Foundation, USA
SOURCE: PCT Int. Appl., 94 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003053407	A1	20030703	WO 2002-US40846	20021219

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,

KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2470920	AA	20030703	CA 2002-2470920	20021219
AU 2002361812	A1	20030709	AU 2002-361812	20021219
US 2003236301	A1	20031225	US 2002-325352	20021219
EP 1463487	A1	20041006	EP 2002-797447	20021219
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
CN 1617711	A	20050518	CN 2002-827914	20021219
JP 2005526705	T2	20050908	JP 2003-554166	20021219
PRIORITY APPLN. INFO.:			US 2001-342156P	P 20011219
			US 2002-406807P	P 20020829
			US 2002-418602P	P 20021015
			WO 2002-US40846	W 20021219

OTHER SOURCE(S): MARPAT 139:90452

AB The present invention provides a method for treating a cell proliferative disease by delivering a composition comprising a vitamin E based anti-**cancer** compound contained within a delivery vesicle of an individual in need of such treatment where the compound is I (R1 is H or a carboxylic acid; R2 and R3 are H or R4; R4 is Me and R5 is alkyl). Also provided is a vesicle comprising these compds. An examples is given for the preparation of 2,5,7,8-tetramethyl-[2R-(4R,8R,12-trimethyltridecyl)chroman-6-yloxy]acetic acid. Pharmacol. examples and liposome formulations are also given.

IT **552855-53-5P**

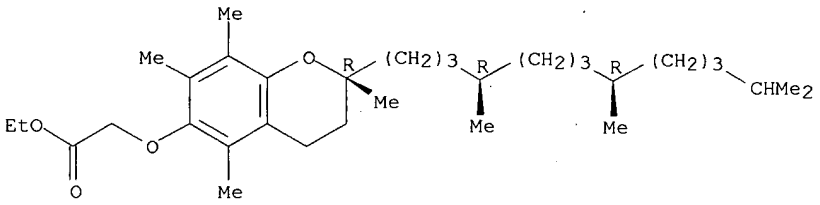
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(liposomal delivery of vitamin E based compds.)

RN 552855-53-5 CAPLUS

CN Acetic acid, [[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:595501 CAPLUS <<LOGINID::20061025>>

DOCUMENT NUMBER: 137:140656

TITLE: Preparation of tocopherols, tocotrienols, other chromans and side chain derivs. as potential antiproliferative and proapoptotic agents

INVENTOR(S): Sanders, Bob G.; Kline, Kimberly; Yu, Weiping

PATENT ASSIGNEE(S): Research Development Foundation, USA

SOURCE: U.S. Pat. Appl. Publ., 44 pp., Cont.-in-part of U. S. Ser. No. 502,592.
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002107207	A1	20020808	US 2001-8066	20011105
US 6703384	B2	20040309		
US 6417223	B1	20020709	US 1999-404001	19990923
CN 1706838	A	20051214	CN 2005-10003855	19990923
US 6770672	B1	20040803	US 2000-502592	20000211

US 2002156024	A1	20021024	US 2002-122019	20020412
US 6645998	B2	20031111		
WO 2003039461	A2	20030515	WO 2002-US35147	20021101
WO 2003039461	A3	20031113		

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2004097431	A1	20040520	US 2003-695275	20031028

PRIORITY APPLN. INFO.:

US 1998-101542P	P	19980923
US 1999-404001	A2	19990923
US 2000-502592	A2	20000211
US 1998-101543P	P	19980923
CN 1999-812829	A3	19990923
US 2001-8066	A	20011105

OTHER SOURCE(S): MARPAT 137:140656

AB Derivs. of tocopherol, tocotrienol and other chromans of formula I (X and Y independently are oxygen, nitrogen or sulfur; when Y is nitrogen, nitrogen is substituted with R6 and R6 = H or Me; R1 = alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxylic acid, carboxylate, carboxamide, ester, thioamide, thiolacid, thiol ester, saccharide, alkoxy-linked saccharide, amine, sulfonate, sulfate, phosphate, alc., ethers or nitrites; R2, R3 = hydrogen or R4; R4 = Me, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzyl ester, saccharide or amine; and R5 = alkenyl) were prepared as antiproliferative and proapoptotic agents for the potential treatment of cell proliferative diseases. Thus, α-tocopherol was treated with Me bromoacetate and NaOH in N, N-dimethylformamide to give II. II showed effective growth inhibitory properties (apoptotic inducing) in a wide variety of human **cancer** cell lines, including breast, prostate, cervical, and ovarian **cancers** with EC50 values ranging from 1-20 μg/mL.

IT **261929-61-7P** **261929-62-8P** **261929-77-5P** **261929-78-6P** **354526-66-2P**

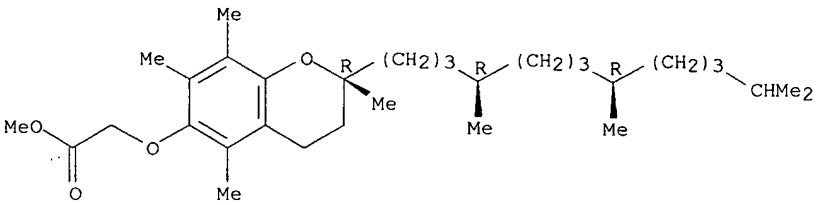
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of tocopherols, tocotrienols, other chromans and side chain derivs. as potential antiproliferative, proapoptotic agents for the treatment of **cancer**)

RN 261929-61-7 CAPLUS

CN Acetic acid, [[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

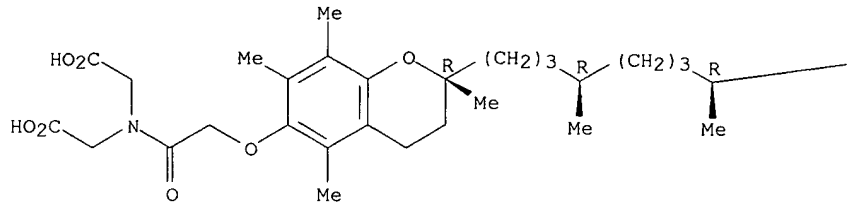


RN 261929-62-8 CAPLUS

CN Glycine, N-(carboxymethyl)-N-[[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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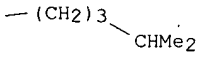
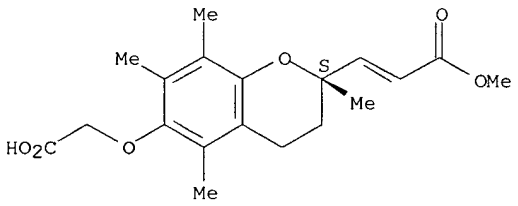


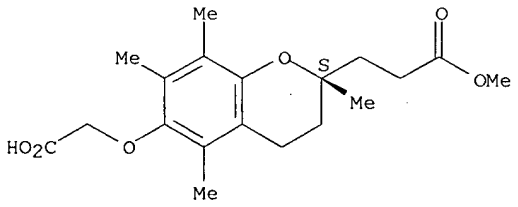
RN 261929-77-5 CAPLUS
CN 2-Propenoic acid, 3-[(2S)-6-(carboxymethoxy)-3,4-dihydro-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]-, 1-methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

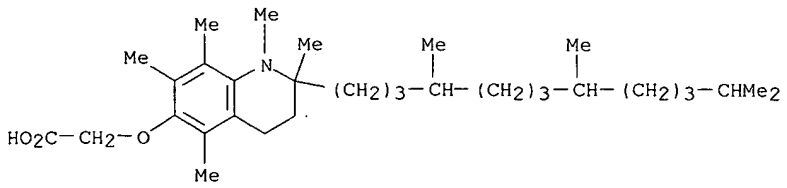


RN 261929-78-6 CAPLUS
CN 2H-1-Benzopyran-2-propanoic acid, 6-(carboxymethoxy)-3,4-dihydro-2,5,7,8-tetramethyl-, α-methyl ester, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 354526-66-2 CAPLUS
CN Acetic acid, [[1,2,3,4-tetrahydro-1,2,5,7,8-pentamethyl-2-(4,8,12-trimethyltridecyl)-6-quinolinyl]oxy]- (9CI) (CA INDEX NAME)

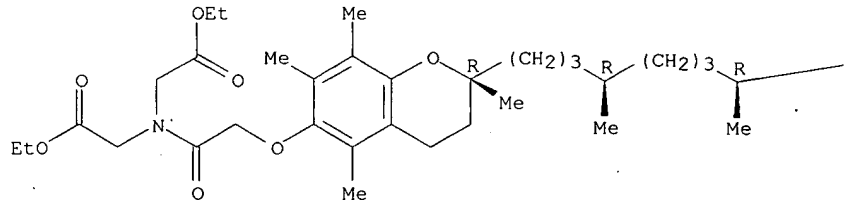


IT **261929-79-7P 261929-84-4P 354526-64-0P 354526-65-1P 444609-57-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of tocopherols, tocotrienols, other chromans and side chain derivs. as potential antiproliferative, proapoptotic agents for the treatment of **cancer**)

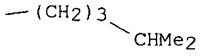
RN 261929-79-7 CAPLUS
CN Glycine, N-[[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]acetyl]-N-(2-ethoxy-2-oxoethyl)-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



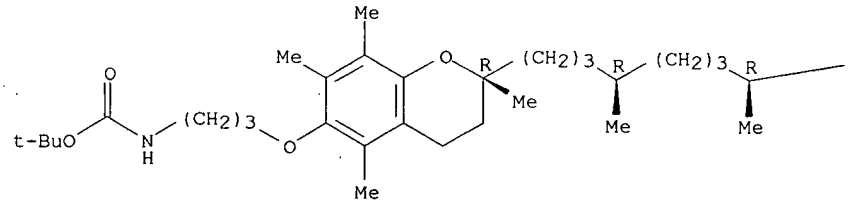
PAGE 1-B



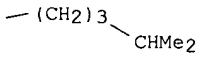
RN 261929-84-4 CAPLUS
CN Carbamic acid, [3-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

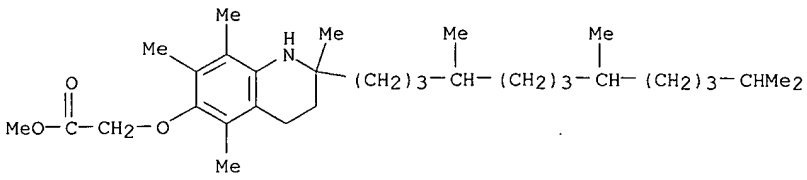
PAGE 1-A



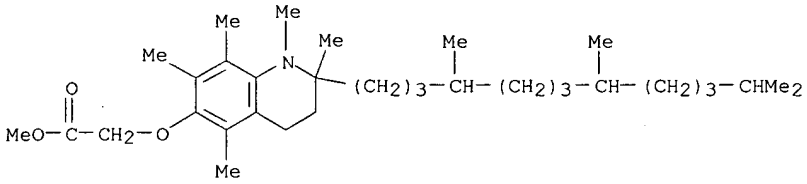
PAGE 1-B



RN 354526-64-0 CAPLUS
CN Acetic acid, [[1,2,3,4-tetrahydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-6-quinolinyl]oxy]-, methyl ester (9CI) (CA INDEX NAME)



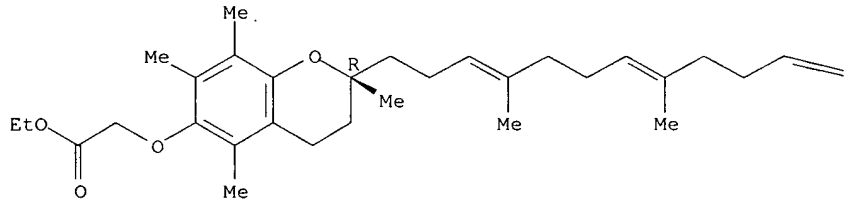
RN 354526-65-1 CAPLUS
CN Acetic acid, [[1,2,3,4-tetrahydro-1,2,5,7,8-pentamethyl-2-(4,8,12-trimethyltridecyl)-6-quinolinyl]oxy]-, methyl ester (9CI) (CA INDEX NAME)



RN 444609-57-8 CAPLUS
CN Acetic acid, [[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyl-3,7,11-tridecatrienyl)-2H-1-benzopyran-6-yl]oxy]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



PAGE 1-B

L10 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:256251 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 136:279341
TITLE: Preparation of benzopyrancarboxylic acid derivatives for the treatment of diabetes and lipid disorders
INVENTOR(S): Sahoo, Soumya P.; Koyama, Hiroo; Miller, Daniel J.; Boueres, Julia K.; Desai, Ranjit C.
PATENT ASSIGNEE(S): Merck & Co., Inc., USA
SOURCE: PCT Int. Appl., 87 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2002026729	A2	20020404	WO 2001-US29456	20010921
WO 2002026729	A3	20020815		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2423141	AA	20020404	CA 2001-2423141	20010921
AU 2001092874	A5	20020408	AU 2001-92874	20010921
EP 1324995	A2	20030709	EP 2001-973277	20010921
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004513090	T2	20040430	JP 2002-531113	20010921
US 2002082292	A1	20020627	US 2001-961841	20010924
US 6645997	B2	20031111		

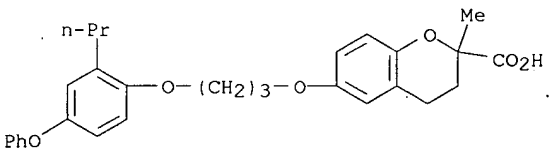
PRIORITY APPLN. INFO.:
US 2000-235708P P 20000927
US 2000-244697P P 20001031
WO 2001-US29456 W 20010921

OTHER SOURCE(S): MARPAT 136:279341

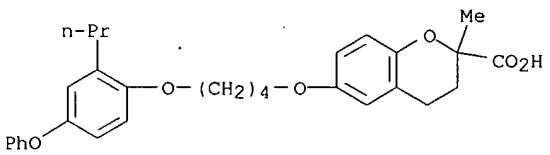
AB Title compds. [I; R = H, CH3CH2, CH3(CH2)2; R1 = CH3(CH2)2, Cl, F; R2 = H, F, (CH3)2CHCH2, Cl, OCH3, CH3SO2; n = 2, 3, 4], pharmaceutically acceptable salts, and stereoisomers are prepared Title compds. I, with effective amount of one or more compds. selected from the group consisting of glitazones, tolbutamide, lovastatin, etc., are potent agonists of PPAR alpha and/or gamma, and are therefore useful in the treatment, control or prevention of non-insulin dependent diabetes mellitus (NIDDM), hyperglycemia, dyslipidemia, hyperlipidemia, hypercholesterolemia, hypertriglyceridemia, atherosclerosis, obesity, vascular restenosis, inflammation, and other PPAR alpha and/or gamma mediated diseases, disorders and conditions.

IT **406488-53-7P 406488-55-9P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of benzopyrancarboxylic acid derivs. for treatment of diabetes and lipid disorders)

RN 406488-53-7 CAPLUS
CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-2-methyl-6-[3-(4-phenoxy-2-propylphenoxy)propoxy]- (9CI) (CA INDEX NAME)



RN 406488-55-9 CAPLUS
CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-2-methyl-6-[4-(4-phenoxy-2-propylphenoxy)butoxy]- (9CI) (CA INDEX NAME)



L10 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:597976 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 135:166941

TITLE: Preparation of tocopherols, tocotrienols, other chroman and side chain derivatives that induce cell apoptosis for therapeutic use as antiproliferative agents

INVENTOR(S): Sanders, Robert G.; Kline, Kimberly; Hurley, Laurence; Gardner, Robb; Menchaca, Marla; Yu, Weiping; Ramanan, Puthucode N.; Liu, Shenquan; Israel, Karen

PATENT ASSIGNEE(S): Research Development Foundation, USA

SOURCE: PCT Int. Appl., 120 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001058889	A1	20010816	WO 2001-US4168	20010209
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6770672	B1	20040803	US 2000-502592	20000211
CA 2399802	AA	20010816	CA 2001-2399802	20010209
EP 1254130	A1	20021106	EP 2001-909008	20010209
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004504268	T2	20040212	JP 2001-558439	20010209
NZ 520798	A	20040528	NZ 2001-520798	20010209
RU 2263672	C2	20051110	RU 2002-124135	20010209

PRIORITY APPLN. INFO.:

US 2000-502592	A	20000211
US 1998-101543P	P	19980923
US 1999-404001	A2	19990923
WO 2001-US4168	W	20010209

OTHER SOURCE(S): MARPAT 135:166941

AB Tocopherol analogs, such as I [X = O, NH, S; Y = O, NH, S; R1 = alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxyl, carboxamide, thiocarboxyl, etc.; R2, R3, R4 = H, Me, benzyl, carboxyl, carboxamide, amine, saccharide; R5 = alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxyl, carboxamide], were prepared for pharmaceutical use as antiproliferative agents which induce cell apoptosis for treatment of **cancers** and diseases involving cell proliferation, such as autoimmune diseases, psoriasis, etc.. Thus, (R,R,R)-α-tocopherol derivative II was prepared in 88% yield by condensation of (R,R,R)-α-tocopherol and BrCH2CO2Me in DMF using NaOH followed by hydrolysis with 5 N HCl. The prepared tocopherol analogs were tested for their ability to induce apoptosis in a number of **cancer** cell lines, such as breast, cervical, colon, prostate, etc.

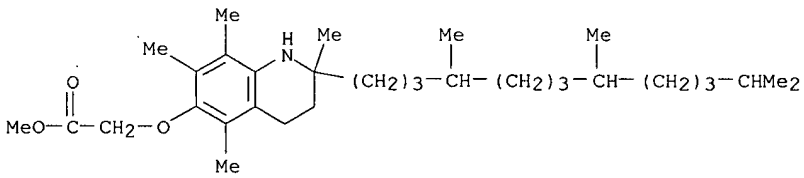
IT **354526-64-0P 354526-65-1P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

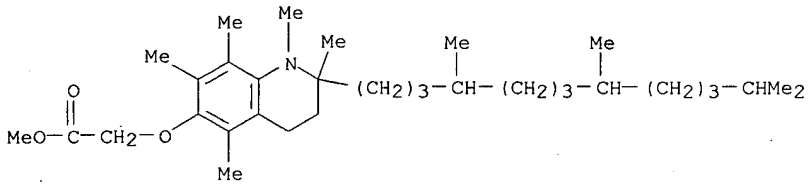
(preparation of tocopherols, tocotrienols, other chromans that induce cell apoptosis for therapeutic use as antiproliferative agents)

RN 354526-64-0 CAPLUS

CN Acetic acid, [[1,2,3,4-tetrahydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-6-quinolinyl]oxy]-, methyl ester (9CI) (CA INDEX NAME)

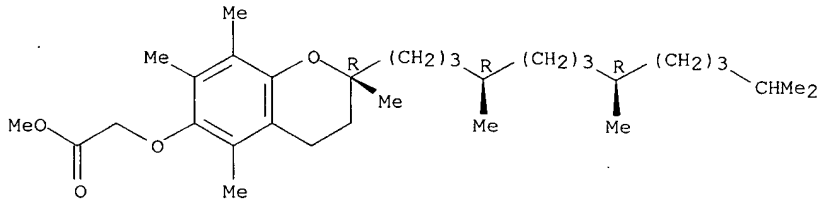


RN 354526-65-1 CAPLUS
CN Acetic acid, [[1,2,3,4-tetrahydro-1,2,5,7,8-pentamethyl-2-(4,8,12-trimethyltridecyl)-6-quinolinyl]oxy]-, methyl ester (9CI) (CA INDEX NAME)



IT **261929-61-7P 261929-62-8P 261929-77-5P 261929-78-6P 354526-66-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of tocopherols, tocotrienols, other chromans that induce cell apoptosis for therapeutic use as antiproliferative agents)
RN 261929-61-7 CAPLUS
CN Acetic acid, [[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]-, methyl ester (9CI) (CA INDEX NAME)

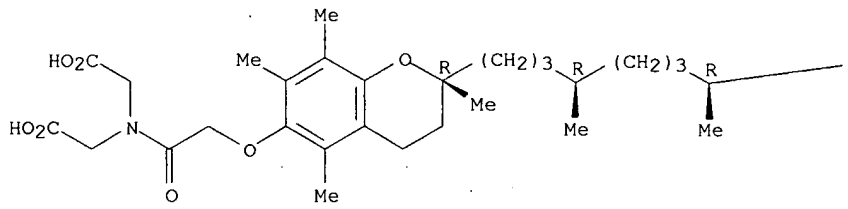
Absolute stereochemistry.



RN 261929-62-8 CAPLUS
CN Glycine, N-(carboxymethyl)-N-[[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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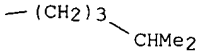
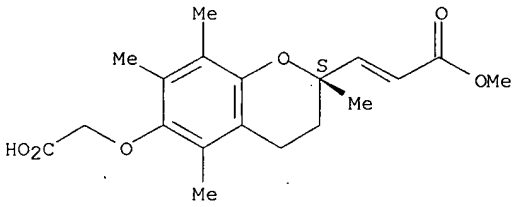


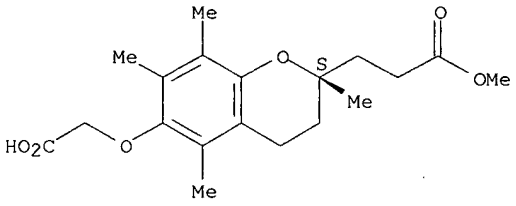
RN 261929-77-5 CAPLUS
CN 2-Propenoic acid, 3-[(2S)-6-(carboxymethoxy)-3,4-dihydro-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]-, 1-methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

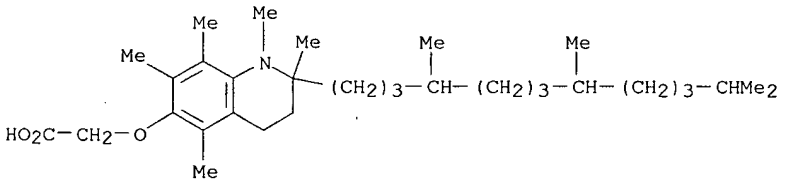


RN 261929-78-6 CAPLUS
CN 2H-1-Benzopyran-2-propanoic acid, 6-(carboxymethoxy)-3,4-dihydro-2,5,7,8-tetramethyl-, α-methyl ester, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



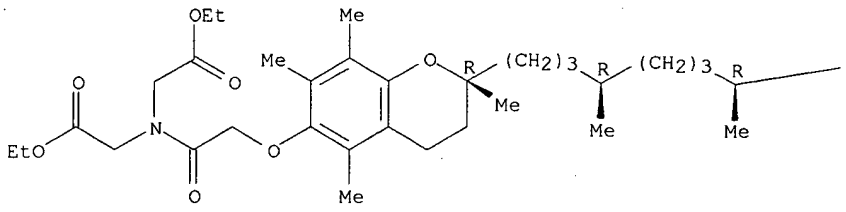
RN 354526-66-2 CAPLUS
CN Acetic acid, [[1,2,3,4-tetrahydro-1,2,5,7,8-pentamethyl-2-(4,8,12-trimethyltridecyl)-6-quinolinyl]oxy]- (9CI) (CA INDEX NAME)



IT **261929-79-7P 261929-84-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of tocopherols, tocotrienols, other chromans that induce cell apoptosis for therapeutic use as antiproliferative agents)
RN 261929-79-7 CAPLUS
CN Glycine, N-[[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]acetyl]-N-(2-ethoxy-2-oxoethyl)-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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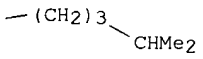
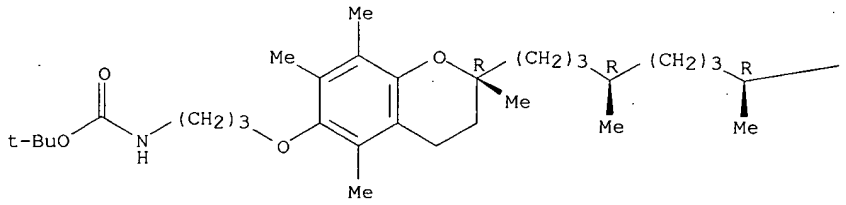


RN 261929-84-4 CAPLUS
CN Carbamic acid, [3-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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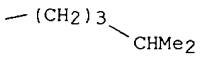


REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:742095 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 133:296438
TITLE: Preparation of substituted fused imidazole derivatives as hypoglycemics
INVENTOR(S): Fujita, Takashi; Wada, Kunio; Oguchi, Minoru; Honma, Hidehito; Fujiwara, Toshihiko
PATENT ASSIGNEE(S): Sankyo Company, Ltd., Japan
SOURCE: PCT Int. Appl., 274 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

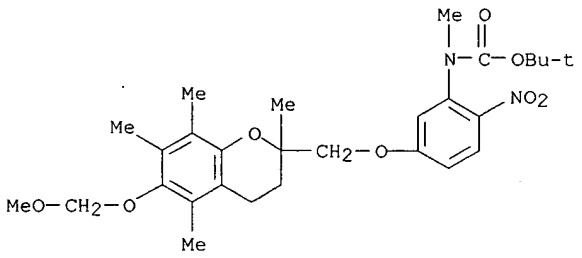
WO 2000061582 A1 20001019 WO 2000-JP2217 20000406
W: AU, BR, CA, CN, CZ, HU, ID, IL, IN, KR, MX, NO, NZ, PL, RU, TR, US, ZA
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
JP 2000351777 A2 20001219 JP 2000-105985 20000407
PRIORITY APPLN. INFO.: JP 1999-101369 A 19990408
OTHER SOURCE(S): MARPAT 133:296438

AB Compds. represented by general formula (I) and salts and esters thereof [wherein R1 is hydrogen, C1-6 alkyl, (un)substituted C6-10 aryl or C7-16 aralkyl, HO, (un)substituted acyloxy, C1-6 alkoxy, (un)substituted NH2, etc.; R2 is hydrogen, C1-6 alkyl, or (un)substituted C7-16 aralkyl; R4, R4, or R5 is each hydrogen, C1-6 alkyl, or C1-6 alkoxy; R6 is hydrogen, C1-6 alkyl, (un)substituted C6-10 aryl or C7-16 aralkyl; Q and Y are each oxygen or sulfur; X is CH2, CO, CH(OR9), or C(:NOR10); wherein R9 or R10 is hydrogen, (un)substituted C1-6 alkyl, C7-16 aralkyl, or acyl; Z is CH or nitrogen; n and q are each 1 to 5; and A is a group represented by general formula Q1, Q2, Q3, or (CH2)m CH(CO2H)-BR7; wherein m is 0 to 8; X1 is oxygen or sulfur; B is oxygen, sulfur, or (un)substituted NH; and R7 is hydrogen, C1-6 alkyl, (un)substituted C6-10 aryl or C7-16 aralkyl, or haloalkyl] are prepared These compds. are useful as insulin resistance improvers, hypoglycemics, antiinflammatory agents, immunomodulators, aldose reductase inhibitors, 5-lipoxygenase inhibitors, lipid peroxide-formation inhibitors, peroxisome proliferator-activated receptor (PPAR) activators, anti-osteoporosis agents, leukotriene antagonists, promoters of fat cell formation, **cancer** cell-proliferation inhibitors, or calcium antagonists. They are useful for the prevention or treatment of diabetes, hyperlipidemia, obesity, glucose tolerance insufficiency, hypertension, fatty liver, diabetes complication, arteriosclerosis, gestational diabetes, polycystic ovarian syndrome, cardiovascular diseases, cell damages caused by atherosclerosis or ischemic heart diseases, gout, osteoarthritis, rheumatic arthritis, allergic diseases, asthma, gastrointestinal ulcer, cachexia, autoimmune diseases, **cancer**, osteoporosis, or cataract. Thus, N-[2-amino-5-(6-methoxymethoxy-2,5,7,8-tetramethylchroman-2-ylmethoxy)phenyl]-N-methylcarbamic acid tert-Bu ester was condensed with 4-(2,4-dioxothiazolin-5-ylmethyl)phenoxyacetic acid using di-Et cyanophosphate and Et3N in THF at room temperature for 30 min, followed by treatment of the product with 4 N HCl/dioxane at room temperature for 5 h gave 5-[4-[6-(6-hydroxy-2,5,7,8-tetramethylchroman-2-ylmethoxy)-1-methyl-1H-benzimidazol-2-ylmethoxy]benzyl]thiazolidine-2,4-dione hydrochloride (II.HCl). When a feed containing 0.01% II.HCl was fed to mice for 3 days, the blood sugar level was lowered by 66.7% compared to control animal.

IT **300666-00-6P** **300666-01-7P** **300666-02-8P**
300666-05-1P **300666-10-8P** **300666-13-1P**
300666-14-2P **300666-15-3P** **300666-16-4P**
300666-17-5P **300666-18-6P** **300666-19-7P**
300666-20-0P **300666-21-1P** **300666-22-2P**
300666-27-7P **300666-28-8P** **300666-31-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of substituted fused imidazole derivs. as therapeutics)

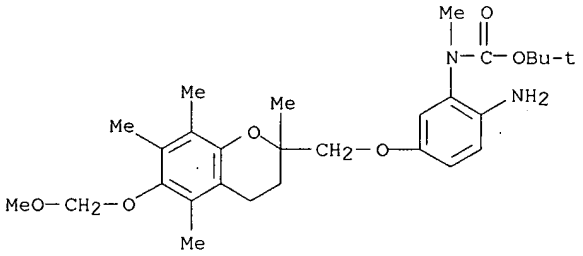
RN 300666-00-6 CAPLUS

CN Carbamic acid, [5-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-nitrophenyl]methyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 300666-01-7 CAPLUS

CN Carbamic acid, [2-amino-5-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]phenyl]methyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 300666-02-8 CAPLUS

CN Carbamic acid, [5-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenoxy]acetyl]amino]phenyl]methyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

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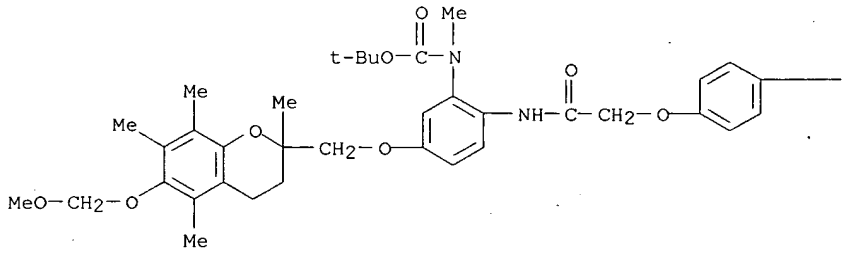

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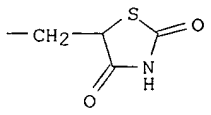
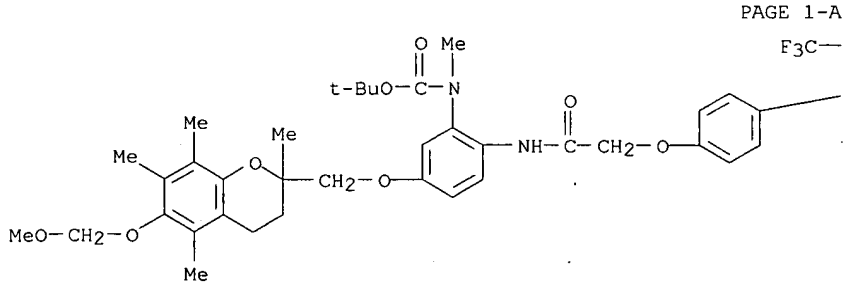


RN 300666-05-1 CAPLUS

CN Benzenepropanoic acid, 4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-α-(2,2,2-trifluoroethoxy)-, methyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



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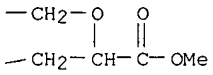

RN 300666-10-8 CAPLUS
CN Benzenepropanoic acid, 4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-α-[[(4-fluorophenyl)methyl]thio]-, methyl ester (9CI) (CA INDEX NAME)

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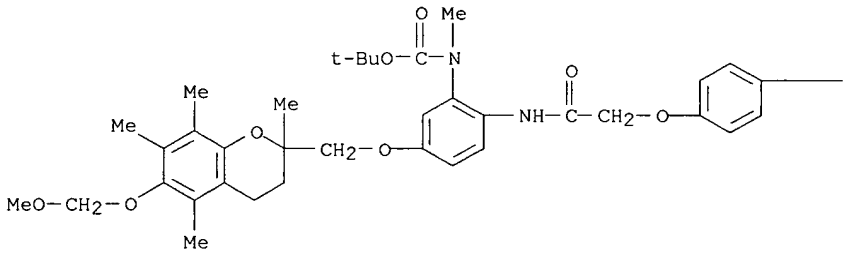

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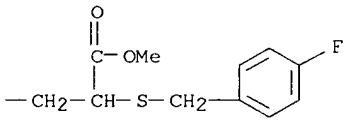
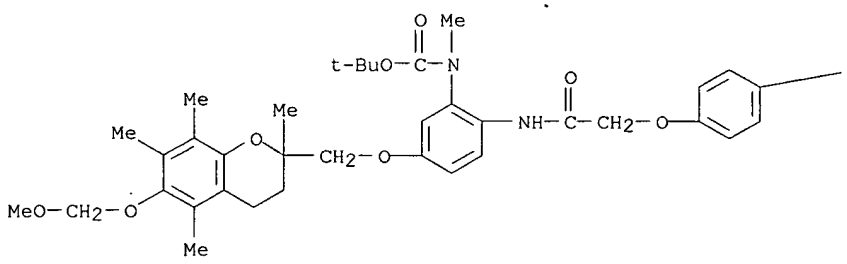


RN 300666-13-1 CAPLUS
CN Benzenepropanoic acid, 4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-α-hydroxy-, ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



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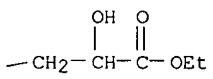

RN 300666-14-2 CAPLUS
CN Benzenepropanoic acid, 4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-α-(phenylthio)-, ethyl ester (9CI) (CA INDEX NAME)

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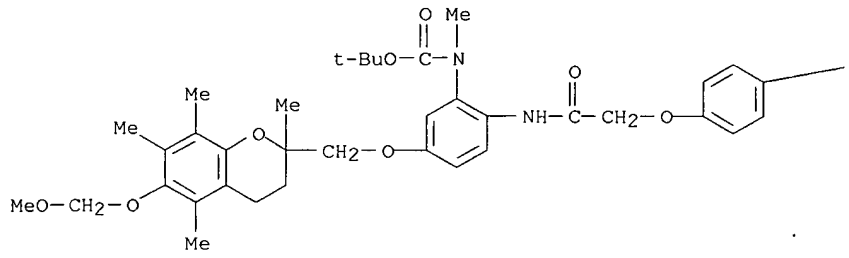

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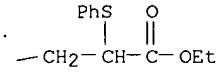
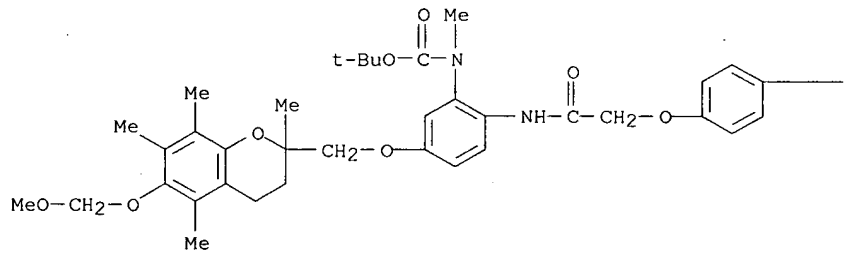


RN 300666-15-3 CAPLUS
CN Benzenepropanoic acid, 4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-α-[(4-nitrophenyl)thio]-, ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



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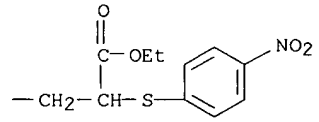
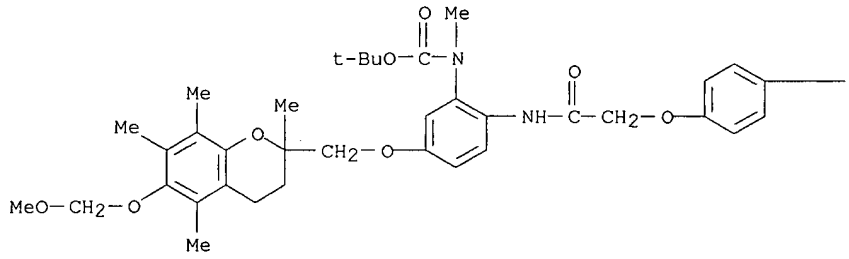


RN 300666-16-4 CAPLUS
CN Benzenepropanoic acid, α-(4-cyanophenoxy)-4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-, ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



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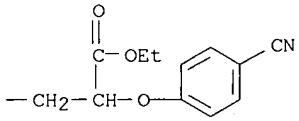
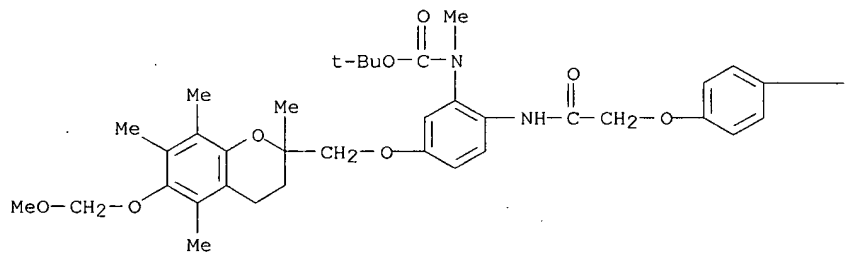


RN 300666-17-5 CAPLUS

CN Benzenepropanoic acid, 4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-α-[(4-methylphenyl)thio]-, ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



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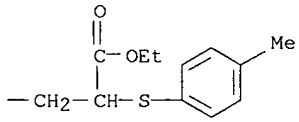

RN 300666-18-6 CAPLUS

CN Benzenepropanoic acid, α-[(4-chlorophenyl)thio]-4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-, ethyl ester (9CI) (CA INDEX NAME)

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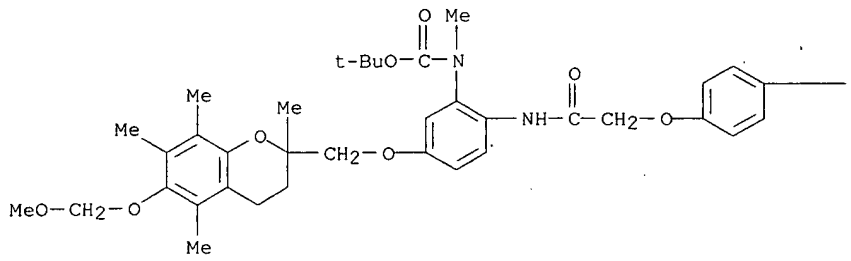

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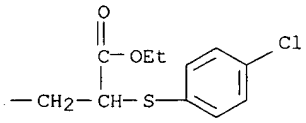
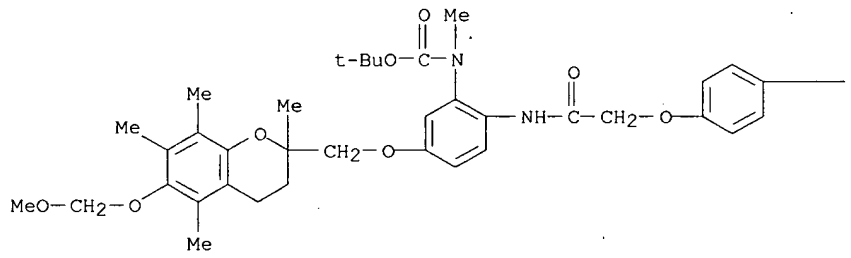


RN 300666-19-7 CAPLUS

CN Benzenepropanoic acid, 4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-α-[[4-(1,1-dimethylethyl)phenyl]thio]-, ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



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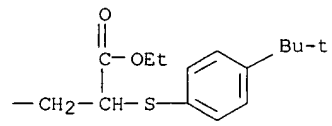

RN 300666-20-0 CAPLUS

CN Benzenepropanoic acid, 4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-α-[(4-methoxyphenyl)thio]-, ethyl ester (9CI) (CA INDEX NAME)

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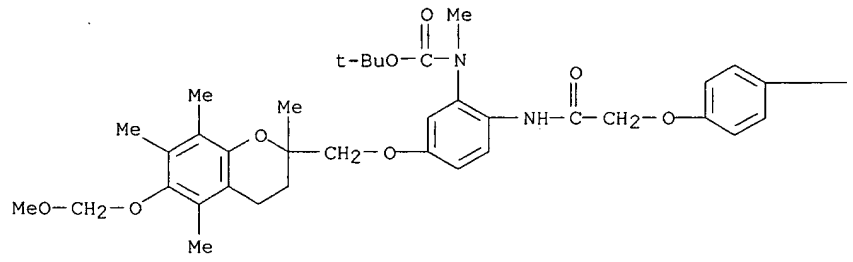

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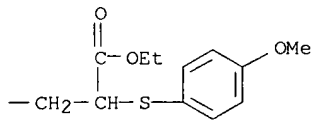

RN 300666-21-1 CAPLUS
CN Benzenepropanoic acid, 4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-α-ethoxy-, ethyl ester (9CI) (CA INDEX NAME)

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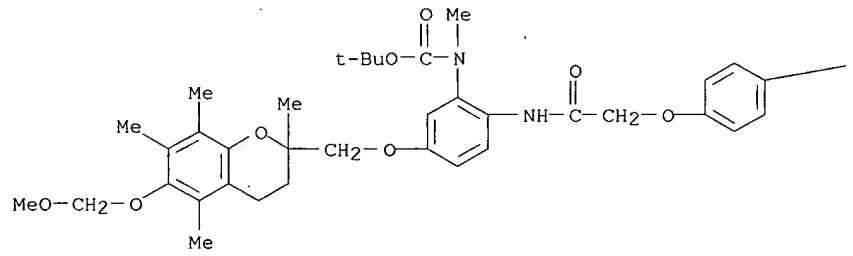

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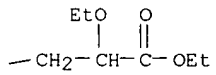

RN 300666-22-2 CAPLUS
CN Benzenepropanoic acid, 4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-α-[(4-fluorophenyl)methoxy]-, ethyl ester (9CI) (CA INDEX NAME)

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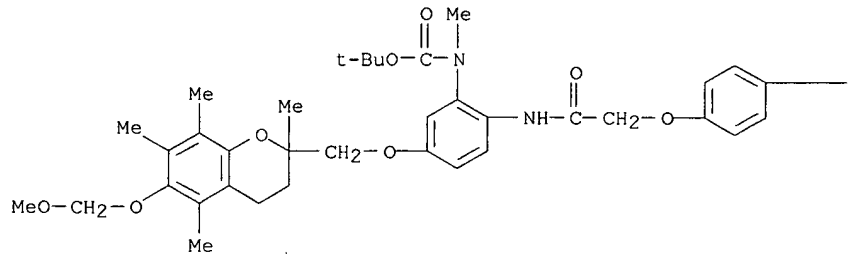

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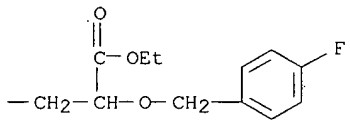
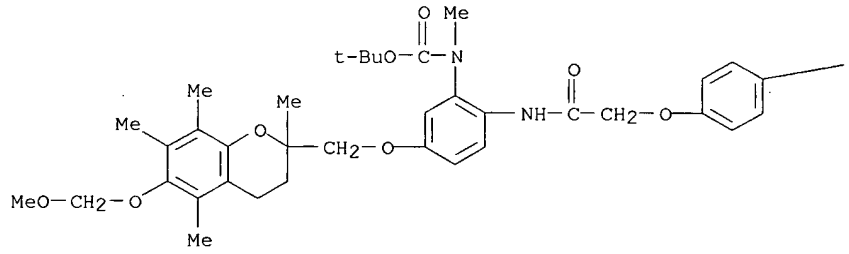


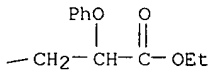
RN 300666-27-7 CAPLUS

CN Benzenepropanoic acid, 4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-α-phenoxy-, ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



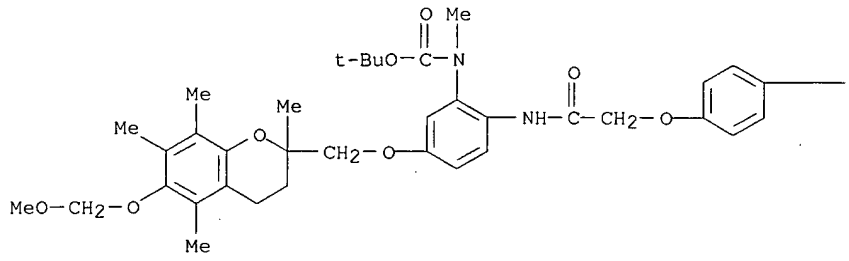
PAGE 1-B



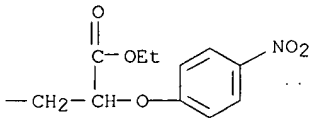
RN 300666-28-8 CAPLUS

CN Benzenepropanoic acid, 4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-α-(4-nitrophenoxy)-, ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



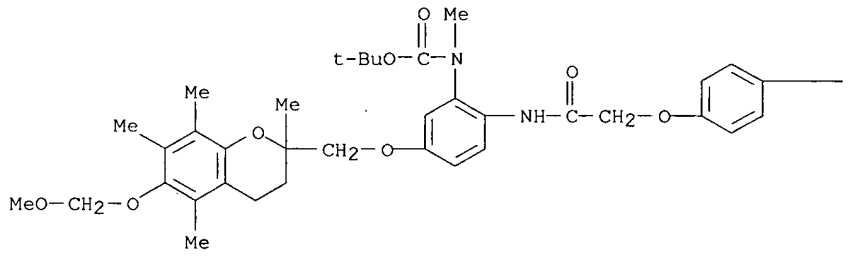
PAGE 1-B



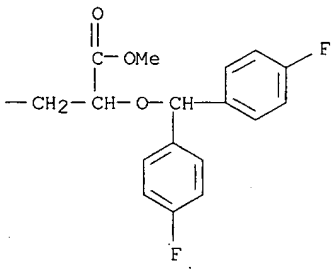
RN 300666-31-3 CAPLUS

CN Benzenepropanoic acid, α-[bis(4-fluorophenyl)methoxy]-4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-, methyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:725453 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 133:291091
TITLE: Antitumor activity of vitamin E, cholesterol, taxol and betulinic acid derivatives
INVENTOR(S): Fariss, Marc; Smith, J. Doyle
PATENT ASSIGNEE(S): Washington State University Research Foundation, USA; Virginia Commonwealth University
SOURCE: PCT Int. Appl., 67 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

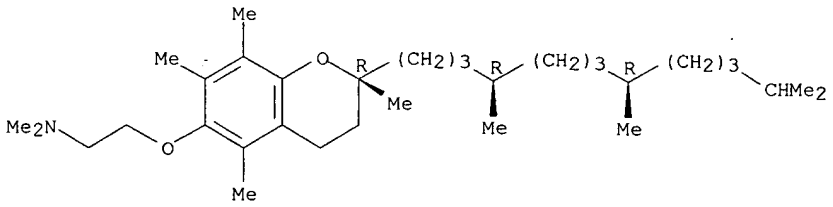
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000059492	A2	20001012	WO 2000-US9141	20000407
WO 2000059492	A3	20020124		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2366807	AA	20001012	CA 2000-2366807	20000407
EP 1189607	A2	20020327	EP 2000-923141	20000407
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.: US 1999-128047P P 19990407
WO 2000-US9141 W 20000407

AB The present invention provides methods for the use of derivs. of Vitamin E (tocopherol and tocotrienol), cholesterol, taxol and betulinic acid as antitumor agents for the treatment of and prevention of **cancers** of the liver, lung, colon, prostate and breast as well as melanomas and leukemias.

IT **300655-66-7P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antitumor activity of vitamin E, cholesterol, taxol and betulinic acid derivs.)
RN 300655-66-7 CAPLUS
CN Ethanamine, 2-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]-N,N-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

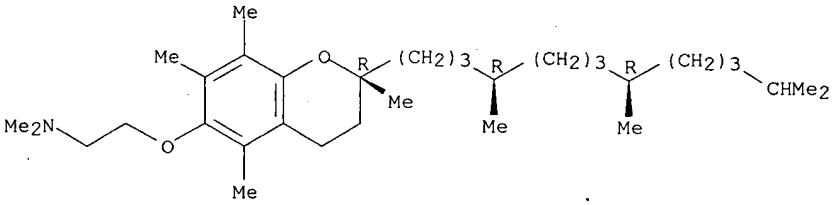


IT **300655-69-0 300655-70-3 300655-94-1**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antitumor activity of vitamin E, cholesterol, taxol and betulinic acid derivs.)
RN 300655-69-0 CAPLUS
CN Ethanamine, 2-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]-N,N-dimethyl-, ethanedioate (2:1) (9CI) (CA INDEX NAME)

CM 1

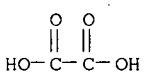
CRN 300655-66-7
CMF C33 H59 N O2

Absolute stereochemistry.



CM 2

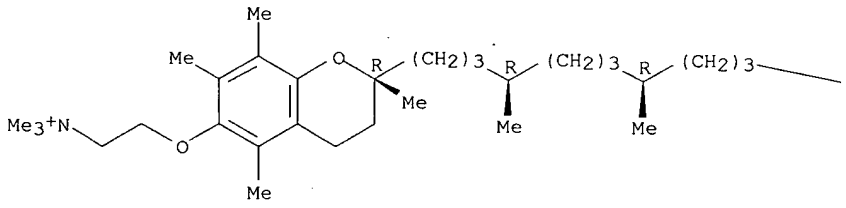
CRN 144-62-7
CMF C2 H2 O4



RN 300655-70-3 CAPLUS
CN Ethanaminium, 2-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]-N,N,N-trimethyl-, iodide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



● I⁻

PAGE 1-B

—CHMe2

RN 300655-94-1 CAPLUS
CN Poly(oxy-1,2-ethanediyl), α-[4-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]-1-oxobutyl]-ω-hydroxy- (9CI) (CA INDEX NAME)

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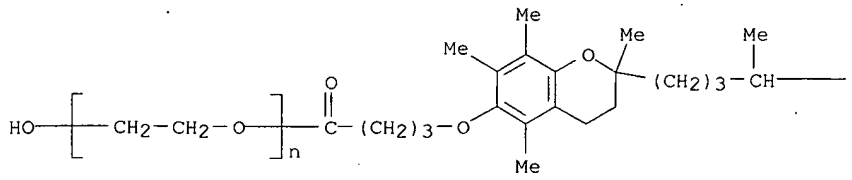
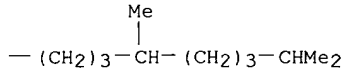


PAGE 1-B



L10 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:209907 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 132:237223
TITLE: Preparation of tocopherols, tocotrienols, other chroman and side chain derivatives for use as antitumor agents and for inducing cell apoptosis
INVENTOR(S): Kline, Kimberly; Sanders, Bob G.; Hurley, Laurence; Gardner, Robb; Menchaca, Marla; Yu, Weiping; Ramanan, Puthucode N.; Liu, Shenquan; Israel, Karen
PATENT ASSIGNEE(S): Research Development Foundation, USA
SOURCE: PCT Int. Appl., 101 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000016772	A1	20000330	WO 1999-US21778	19990923
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2345079	AA	20000330	CA 1999-2345079	19990923
AU 9961553	A1	20000410	AU 1999-61553	19990923
AU 757013	B2	20030130		
EP 1115398	A1	20010718	EP 1999-948352	19990923
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
CN 1325303	A	20011205	CN 1999-812829	19990923
JP 2002526446	T2	20020820	JP 2000-573733	19990923
NZ 510732	A	20040130	NZ 1999-510732	19990923
RU 2232758	C2	20040720	RU 2001-111019	19990923
CN 1706838	A	20051214	CN 2005-10003855	19990923
IL 142082	A1	20051218	IL 1999-142082	19990923
TW 592695	B	20040621	TW 1999-88120073	19991117
ZA 2001002057	A	20020319	ZA 2001-2057	20010313

PRIORITY APPLN. INFO.:	US 1998-101542P	P	19980923
	CN 1999-812829	A3	19990923
	WO 1999-US21778	W	19990923

OTHER SOURCE(S): MARPAT 132:237223
AB Chromans I [R1 = alkyl, alkenyl, alkynyl, aryl, herteroaryl, carboxyl, carboxamide, thioamide, saccharide, amine, sulfate, phosphate, etc.; R2, R3, R4 = H, Me, benzylcarboxylate, saccharide, amino, etc.; R5 = alkyl, alkenyl, alkynyl, aryl, herteroaryl, carboxyl, carboxamide; X = O, NH, S] were prepared for pharmaceutical use as antitumor agents and cell apoptosis

inducing agents. Thus, tocopherol derivative II (R1 = CH2CO2H, X = O) was prepared in 88% yield via O-alkylation of (+)-α-tocopherol with Me bromoacetate. The prepared chromans were tested for cell apoptosis activity against a variety of **cancer** cell lines.

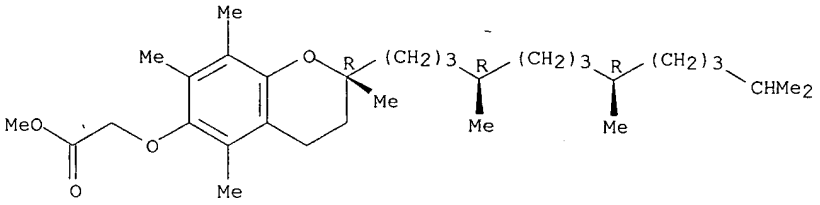
IT **261929-61-7P 261929-62-8P 261929-77-5P 261929-78-6P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for use as antitumor agents and for inducing cell apoptosis)

RN 261929-61-7 CAPLUS

CN Acetic acid, [[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

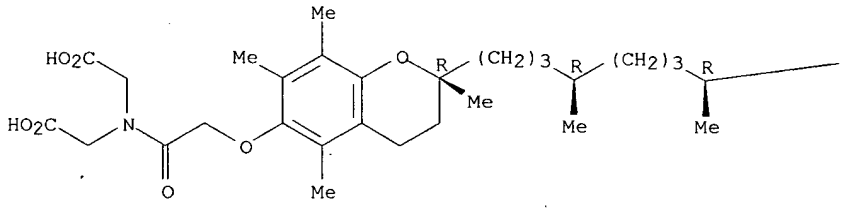


RN 261929-62-8 CAPLUS

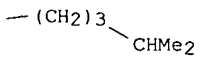
CN Glycine, N-(carboxymethyl)-N-[[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



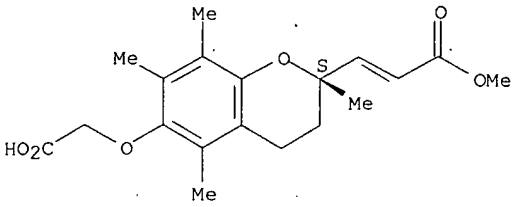
PAGE 1-B



RN 261929-77-5 CAPLUS

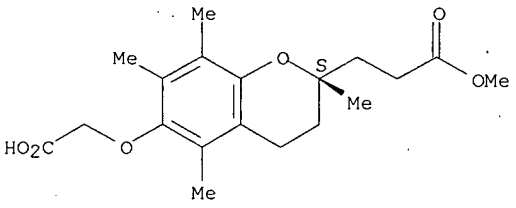
CN 2-Propenoic acid, 3-[(2S)-6-(carboxymethoxy)-3,4-dihydro-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]-, 1-methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



RN 261929-78-6 CAPLUS
CN 2H-1-Benzopyran-2-propanoic acid, 6-(carboxymethoxy)-3,4-dihydro-2,5,7,8-tetramethyl-, α-methyl ester, (2S)- (9CI) (CA INDEX NAME)

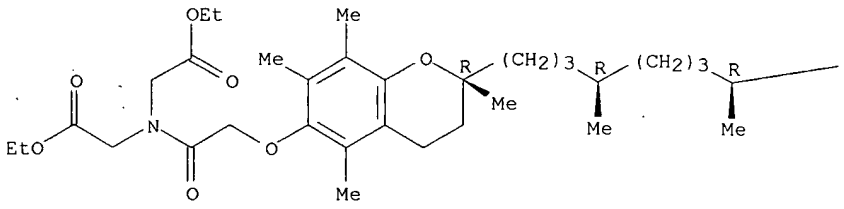
Absolute stereochemistry.



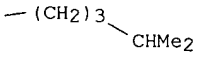
IT **261929-79-7P 261929-84-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for use as antitumor agents and for inducing cell apoptosis)
RN 261929-79-7 CAPLUS
CN Glycine, N-[[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]acetyl]-N-(2-ethoxy-2-oxoethyl)-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



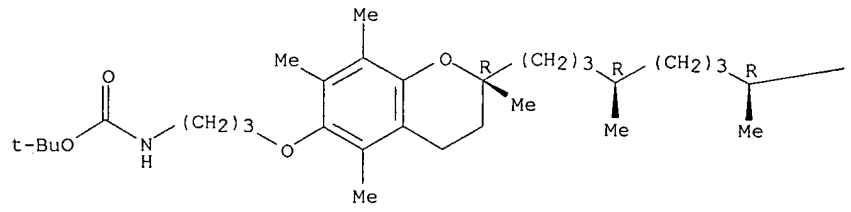
PAGE 1-B



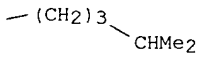
RN 261929-84-4 CAPLUS
CN Carbamic acid, [3-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:462523 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 125:114896
TITLE: 3,4-dihydro-2,5,7,8-tetramethyl-benzopyran-6-ol derivatives for use as drugs
INVENTOR(S): Gotteland, Jean-Pierre; Gotteland, Jean-pierre; Delhon, Andre; Junquero, Didier; Oms, Philippe
PATENT ASSIGNEE(S): Pierre Fabre Medicament, Fr.
SOURCE: PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 9616957	A1	19960606	WO 1995-FR1547		19951123
W: AU, CA, JP, NZ, US					
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
FR 2727414	A1	19960531	FR 1994-14142		19941125
FR 2727414	B1	19970214			
AU 9642640	A1	19960619	AU 1996-42640		19951123
PRIORITY APPLN. INFO.:			FR 1994-14142	A	19941125
			WO 1995-FR1547	W	19951123

OTHER SOURCE(S): MARPAT 125:114896

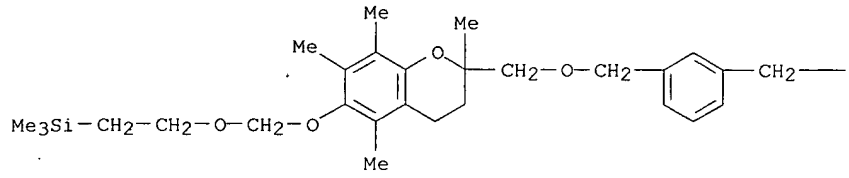
AB Compds. of general formula I, wherein n = 1-10, R = CH2OR1, CONR1R2, CH2NR1R2 or Ar1, in which R1, R2 are identical or different each representing H, linear or branched alkyl of 1-20 carbons, saturated or containing double or triple bonds and possibly substituted with Ph, pyridine, or benzopyran derivative, halogen, alkoxy, alkylamine, ether, thioether, or silane groups, salts, hydrates, solvates and therapeutically acceptable prodrugs thereof, as well as racemic forms and enantiomers thereof, are disclosed. A method for preparing the compds., and pharmaceutical compns. containing said compds. as the active principle for treating and/or preventing acute or chronic inflammatory diseases, are also disclosed. I (R = Ph, n = 1) was prepared via O-benzylation of II with PhCH2Br in DMF containing NaH. The antioxidant behavior of several I in human LDL endothelial cells were obtained with an IC50 (μM) range of 0.03 - 0.3 compared to 15 for vitamin E.

IT **179188-24-0P 179188-36-4P**
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of dihydrotetramethylbenzopyranol derivs. for use as drugs)

RN 179188-24-0 CAPLUS
CN 1-Oxa-3,8-diazaspiro[4.5]decan-2-one, 8-[[3-[[[3,4-dihydro-2,5,7,8-

tetramethyl-6-[[2-(trimethylsilyl)ethoxy]methoxy]-2H-1-benzopyran-2-yl]methoxy]methyl]phenyl]methyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



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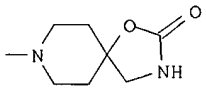
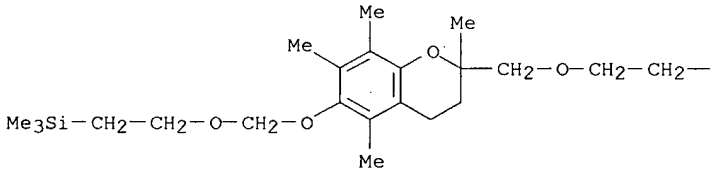
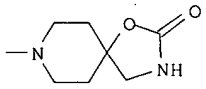


RN 179188-36-4 CAPLUS
CN 1-Oxa-3,8-diazaspiro[4.5]decan-2-one, 8-[2-[[3,4-dihydro-2,5,7,8-tetramethyl-6-[[2-(trimethylsilyl)ethoxy]methoxy]-2H-1-benzopyran-2-yl]methoxy]ethyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

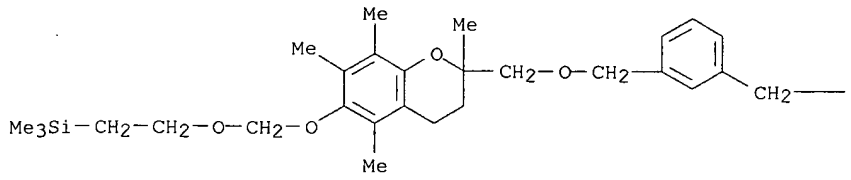


PAGE 1-B

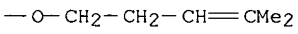


IT **179188-43-3P 179188-44-4P 179188-45-5P 179188-46-6P 179188-47-7P 179188-48-8P 179188-49-9P 179188-51-3P 179188-52-4P 179188-53-5P 179188-54-6P 179188-55-7P 179188-56-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of dihydrotetramethylbenzopyranol derivs. for use as drugs)
RN 179188-43-3 CAPLUS
CN Silane, [2-[[[3,4-dihydro-2,5,7,8-tetramethyl-2-[[[3-[[(4-methyl-3-pentenyl)oxy]methyl]phenyl]methoxy]methyl]-2H-1-benzopyran-6-yl]oxy]methoxy]ethyl]trimethyl- (9CI) (CA INDEX NAME)

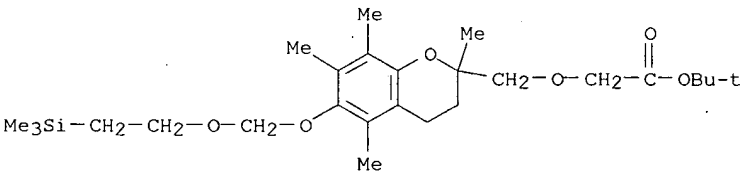
PAGE 1-A



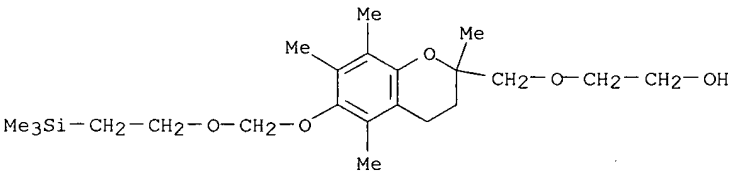
PAGE 1-B



RN 179188-44-4 CAPLUS
CN Acetic acid, [[3,4-dihydro-2,5,7,8-tetramethyl-6-[[2-(trimethylsilyl)ethoxy]methoxy]-2H-1-benzopyran-2-yl]methoxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



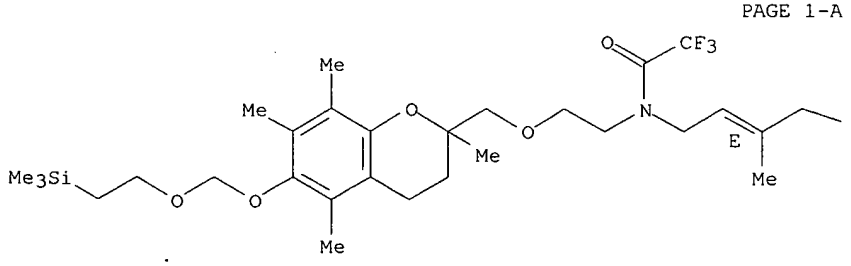
RN 179188-45-5 CAPLUS
CN Ethanol, 2-[[3,4-dihydro-2,5,7,8-tetramethyl-6-[[2-(trimethylsilyl)ethoxy]methoxy]-2H-1-benzopyran-2-yl]methoxy]- (9CI) (CA INDEX NAME)



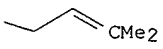
RN 179188-46-6 CAPLUS
CN Acetamide, N-[2-[[3,4-dihydro-2,5,7,8-tetramethyl-6-[[2-(trimethylsilyl)ethoxy]methoxy]-2H-1-benzopyran-2-yl]methoxy]ethyl]-N-(3,7-dimethyl-2,6-octadienyl)-2,2,2-trifluoro-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

PAGE 1-A



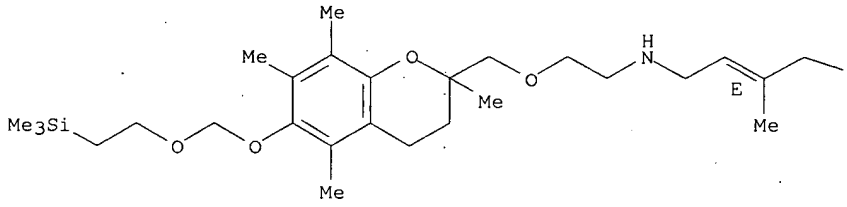
PAGE 1-B



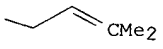
RN 179188-47-7 CAPLUS
CN 2,6-Octadien-1-amine, N-[2-[[3,4-dihydro-2,5,7,8-tetramethyl-6-[[2-(trimethylsilyl)ethoxy]methoxy]-2H-1-benzopyran-2-yl]methoxy]ethyl]-3,7-dimethyl-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

PAGE 1-A



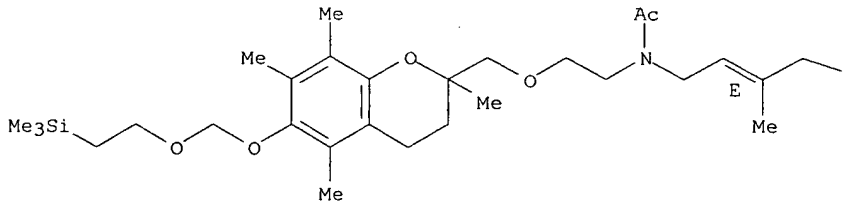
PAGE 1-B



RN 179188-48-8 CAPLUS
CN Acetamide, N-[2-[[3,4-dihydro-2,5,7,8-tetramethyl-6-[[2-(trimethylsilyl)ethoxy]methoxy]-2H-1-benzopyran-2-yl]methoxy]ethyl]-N-(3,7-dimethyl-2,6-octadienyl)-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

PAGE 1-A



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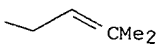
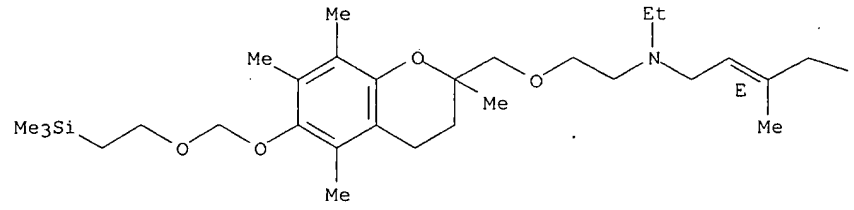


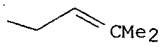
RN 179188-49-9 CAPLUS
CN 2,6-Octadien-1-amine, N-[2-[[3,4-dihydro-2,5,7,8-tetramethyl-6-[[2-(trimethylsilyl)ethoxy]methoxy]-2H-1-benzopyran-2-yl]methoxy]ethyl]-N-ethyl-3,7-dimethyl-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

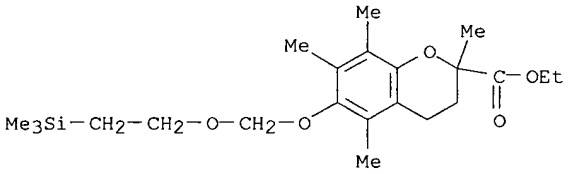
PAGE 1-A



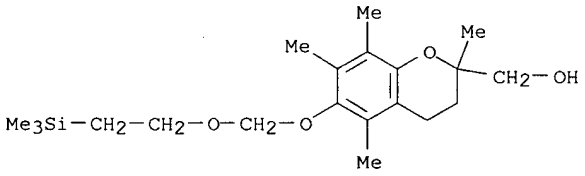
PAGE 1-B



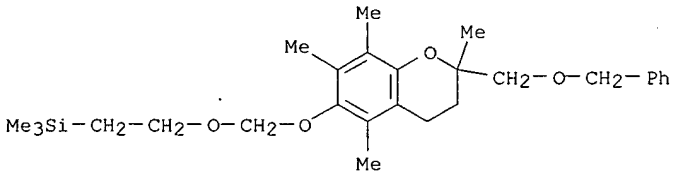
RN 179188-51-3 CAPLUS
CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-2,5,7,8-tetramethyl-6-[[2-(trimethylsilyl)ethoxy]methoxy]-, ethyl ester (9CI) (CA INDEX NAME)



RN 179188-52-4 CAPLUS
CN 2H-1-Benzopyran-2-methanol, 3,4-dihydro-2,5,7,8-tetramethyl-6-[[2-(trimethylsilyl)ethoxy]methoxy]- (9CI) (CA INDEX NAME)

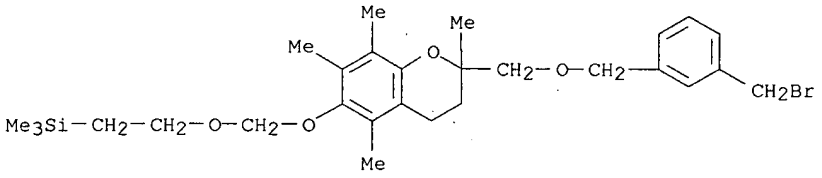


RN 179188-53-5 CAPLUS
CN Silane, [2-[[[3,4-dihydro-2,5,7,8-tetramethyl-2-[(phenylmethoxy)methyl]-2H-1-benzopyran-6-yl]oxy]methoxy]ethyl]trimethyl- (9CI) (CA INDEX NAME)



RN 179188-54-6 CAPLUS
CN Silane, [2-[[[2-[[[3-(bromomethyl)phenyl]methoxy]methyl]-3,4-dihydro-2,5,7,8-tetramethyl-2H-1-benzopyran-6-yl]oxy]methoxy]ethyl]trimethyl-

(9CI) (CA INDEX NAME)



RN 179188-55-7 CAPLUS
CN Silane, [1,3-phenylenebis[methyleneoxymethylene(3,4-dihydro-2,5,7,8-tetramethyl-2H-1-benzopyran-2,6-diyl)oxymethyleneoxy-2,1-ethanediyl]]bis[trimethyl- (9CI) (CA INDEX NAME)

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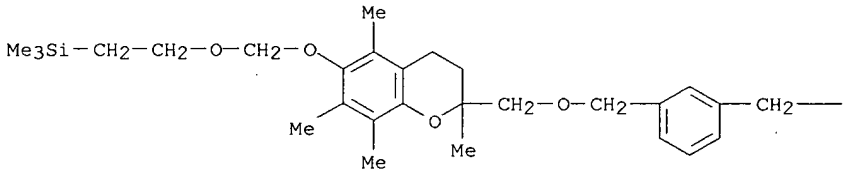
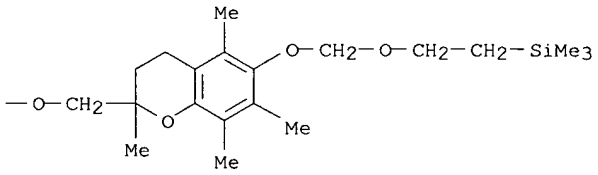
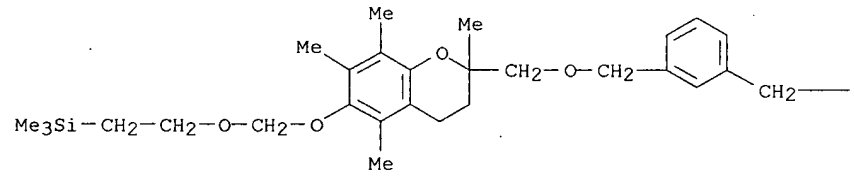


PAGE 1-B



RN 179188-56-8 CAPLUS
CN Benzenemethanamine, 3-[[[3,4-dihydro-2,5,7,8-tetramethyl-6-[[2-(trimethylsilyl)ethoxy]methoxy]-2H-1-benzopyran-2-yl]methoxy]methyl]-N,N-diethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



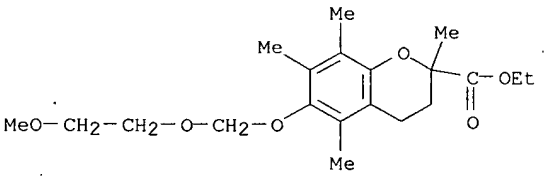
PAGE 1-B

L11 ANSWER 1 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:376667 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 145:83067
TITLE: NO-Donor Phenols: A New Class of Products Endowed with Antioxidant and Vasodilator Properties
AUTHOR(S): Boschi, Donatella; Tron, Gian Cesare; Lazzarato, Loretta; Chegaev, Konstantin; Cena, Clara; Di Stilo, Antonella; Giorgis, Marta; Bertinaria, Massimo; Fruttero, Roberta; Gasco, Alberto
CORPORATE SOURCE: Dipartimento di Scienza e Tecnologia del Farmaco, Universita degli Studi di Torino, Turin, 10125, Italy
SOURCE: Journal of Medicinal Chemistry (2006), 49(10), 2886-2897
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

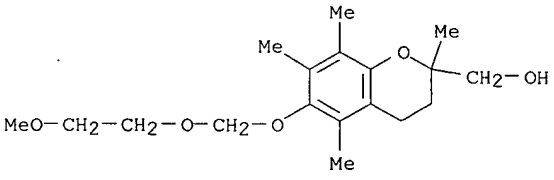
AB The synthesis and study of the antioxidant and vasodilator properties of a new class of phenols able to release nitric oxide are described. The products were designed through a symbiotic approach using selected phenols and selected nitrooxy and furoxan NO-donors as reference models. The antioxidant activities of the hybrid products were assessed by detecting the 2-thiobarbituric acid reactive substances (TBARS) produced in the ferrous salt/ascorbate-induced autoxidn. of lipids present in microsomal membranes of rat hepatocytes. The vasodilator activity was assessed on rat aortic strips pre-treated with phenylephrine. Some of the products behave principally as vasodilators and others as antioxidants and the two properties are relatively balanced in several compds. Further in vivo studies should clarify whether some of these products may become preclin. candidates for the treatment of cardiovascular disease under-pinned by atheroma.

IT **820976-57-6P 820976-58-7P 820976-63-4P 820976-64-5P 820976-65-6P 893403-72-0P 893403-91-3P 893403-96-8P 893403-97-9P 893403-98-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of nitric oxide-donor phenol derivs. and study of their activity as antioxidants and vasodilators)

RN 820976-57-6 CAPLUS
CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-6-[(2-methoxyethoxy)methoxy]-2,5,7,8-tetramethyl-, ethyl ester (9CI) (CA INDEX NAME)

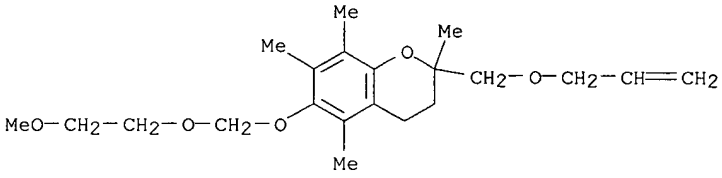


RN 820976-58-7 CAPLUS
CN 2H-1-Benzopyran-2-methanol, 3,4-dihydro-6-[(2-methoxyethoxy)methoxy]-2,5,7,8-tetramethyl- (9CI) (CA INDEX NAME)

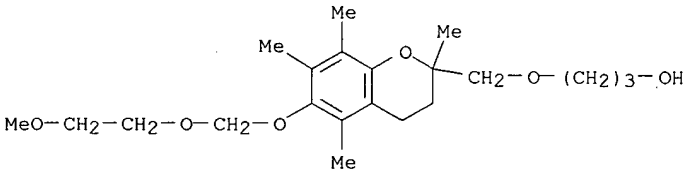


RN 820976-63-4 CAPLUS
CN 2H-1-Benzopyran, 3,4-dihydro-6-[(2-methoxyethoxy)methoxy]-2,5,7,8-

tetramethyl-2-[(2-propenyloxy)methyl]- (9CI) (CA INDEX NAME)

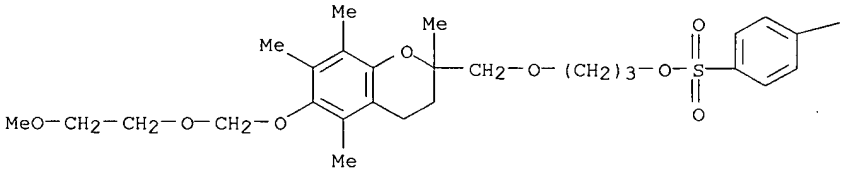


RN 820976-64-5 CAPLUS
CN 1-Propanol, 3-[[3,4-dihydro-6-[(2-methoxyethoxy)methoxy]-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]- (9CI) (CA INDEX NAME)



RN 820976-65-6 CAPLUS
CN 1-Propanol, 3-[[3,4-dihydro-6-[(2-methoxyethoxy)methoxy]-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-, 4-methylbenzenesulfonate (9CI) (CA INDEX NAME)

PAGE 1-A



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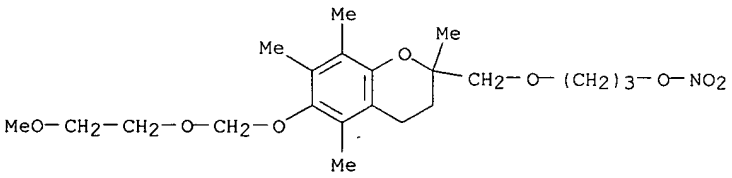
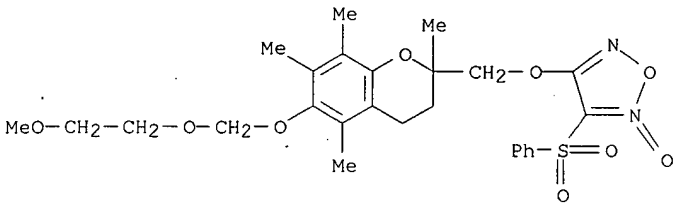
Me

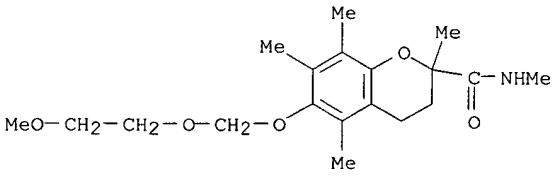
RN 893403-72-0 CAPLUS
CN 1-Propanol, 3-[[3,4-dihydro-6-[(2-methoxyethoxy)methoxy]-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-, nitrate (9CI) (CA INDEX NAME)



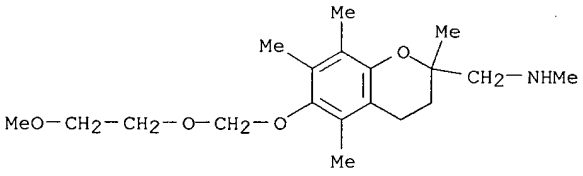
RN 893403-91-3 CAPLUS
CN 1,2,5-Oxadiazole, 3-[[3,4-dihydro-6-[(2-methoxyethoxy)methoxy]-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-4-(phenylsulfonyl)-, 5-oxide (9CI) (CA INDEX NAME)



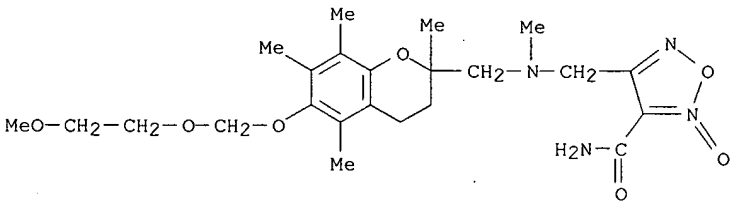
RN 893403-96-8 CAPLUS
CN 2H-1-Benzopyran-2-carboxamide, 3,4-dihydro-6-[(2-methoxyethoxy)methoxy]-N,2,5,7,8-pentamethyl- (9CI) (CA INDEX NAME)



RN 893403-97-9 CAPLUS
CN 2H-1-Benzopyran-2-methanamine, 3,4-dihydro-6-[(2-methoxyethoxy)methoxy]-N,2,5,7,8-pentamethyl- (9CI) (CA INDEX NAME)



RN 893403-98-0 CAPLUS
CN 1,2,5-Oxadiazole-3-carboxamide, 4-[[[[3,4-dihydro-6-[(2-methoxyethoxy)methoxy]-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methyl]methylamino]methyl]-, 2-oxide (9CI) (CA INDEX NAME)



REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:76829 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 144:156918
TITLE: Preparation of vitamin E derivatives for inhibiting reactive oxygen and carbonyl species
INVENTOR(S): Hai, Ton That; Nordhaus, Mark; Sanders, Paul; Jiang, Cong; Karoor, Sujatha; Melnick, Ben; Martis, Leo
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 35 pp.

CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006016752	A1	20060126	US 2004-899194	20040726
WO 2006019855	A1	20060223	WO 2005-US24913	20050622

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

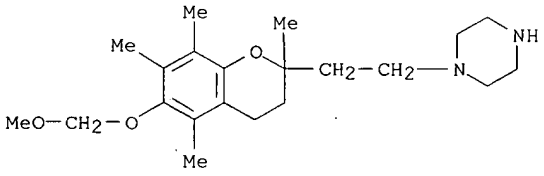
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2004-899194 A 20040726

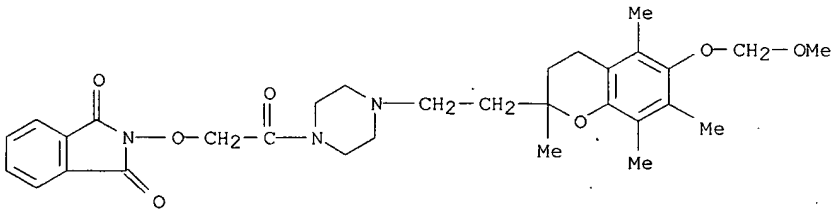
AB Vitamin E derivs. are prepared such that they can display both antioxidant and carbonyl trapping properties. This can effectively reduce inflammation, oxidative stress and carbonyl stress, such as to prevent and/or treat cardiovascular disease and inflammatory diseases in kidney disease patients. E.g., I and three other vitamin E derivs. were prepared and tested for antioxidant and carbonyl trapping properties.

IT **874114-81-5P** **874114-82-6P** **874114-83-7P** **874114-84-8P** **874114-88-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of vitamin E derivs. for inhibiting reactive oxygen and. carbonyl species)

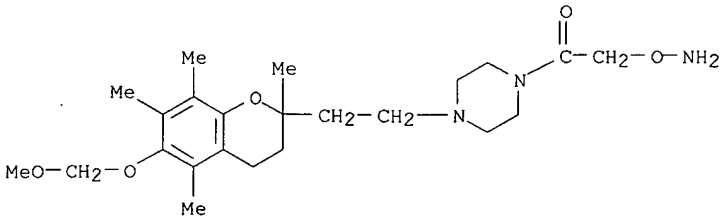
RN 874114-81-5 CAPLUS
CN Piperazine, 1-[2-[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]ethyl]- (9CI) (CA INDEX NAME)



RN 874114-82-6 CAPLUS
CN Piperazine, 1-[[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)oxy]acetyl]-4-[2-[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]ethyl]- (9CI) (CA INDEX NAME)



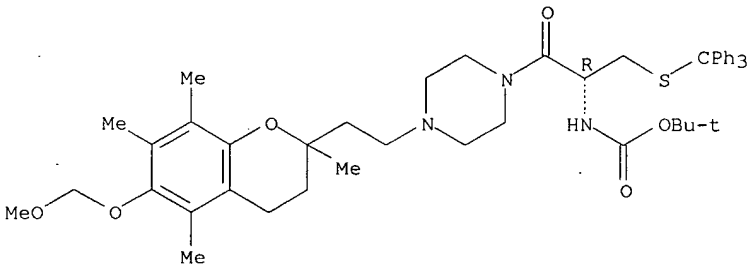
RN 874114-83-7 CAPLUS
CN Piperazine, 1-[(aminooxy)acetyl]-4-[2-[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]ethyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

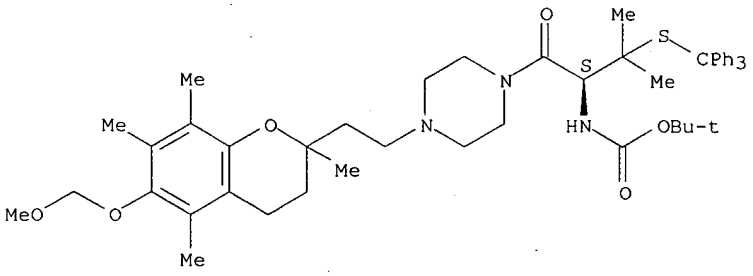
RN 874114-84-8 CAPLUS
CN Carbamic acid, [(1R)-2-[4-[2-[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]ethyl]-1-piperazinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 874114-88-2 CAPLUS
CN Carbamic acid, [(1S)-1-[[4-[2-[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]ethyl]-1-piperazinyl]carbonyl]-2-methyl-2-[(triphenylmethyl)thio]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L11 ANSWER 3 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:158624 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 142:261303
TITLE: Preparation of anthranilic acid derivatives as selective agonists of the nicotinic acid receptor HM74A
INVENTOR(S): Campbell, Mathew; Hatley, Richard Jonathan; Heer, Jag Paul; Mason, Andrew McMurtrie; Pinto, Ivan Leo; Rahman, Shahzad Sharooq; Smith, Ian Edward David

PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA
SOURCE: PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

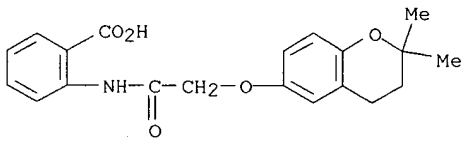
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005016867	A2	20050224	WO 2004-GB3516	20040813
WO 2005016867	A3	20050331		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1689699	A2	20060816	EP 2004-768077	20040813
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR				

PRIORITY APPLN. INFO.: GB 2003-19126 A 20030814
WO 2004-GB3516 W 20040813
OTHER SOURCE(S): CASREACT 142:261303; MARPAT 142:261303

AB Therapeutically active anthranilic acid derivs. I [R1 = H, halo, alkyl; R2 = 9-10 membered (un)saturated bicyclic ring system optionally including from 1 to 3 heteroatoms selected from S, O and N; Z = (CH2)n, CH:CH(CH2)m, O, etc.; n = 2-4; m = 0-2], processes for the preparation of said compds. I, pharmaceutical formulations containing the active compds. and the use of the compds. in therapy, particularly in the treatment of diseases in which under-activation of the HM74A receptor contributes to the disease or in which activation of the receptor will be beneficial, are disclosed. Thus, reacting 3-(naphthalen-1-yl)propionic acid with 2-aminobenzoic acid in the presence of HBTU and Et3N in MeCN afforded I [R1 = H; R2 = 1-naphthyl; Z = (CH2)2]. The compds. I showed EC50 of 5.0 or greater and efficacy of 30% or greater in HM74A in-vitro assays.

IT **845829-85-8P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of anthranilic acid derivs. as selective agonists of the nicotinic acid receptor HM74A for treating lipid metabolic diseases)

RN 845829-85-8 CAPLUS
CN Benzoic acid, 2-[[[(3,4-dihydro-2,2-dimethyl-2H-1-benzopyran-6-yl)oxy]acetyl]amino]- (9CI) (CA INDEX NAME)



L11 ANSWER 4 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:34585 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 142:120546
TITLE: Propofol formulations with non-reactive container closures
INVENTOR(S): Desai, Neil P.; Yang, Andrew; Ci, Sherry Xiaopei
PATENT ASSIGNEE(S): American Bioscience, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 18 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005009731	A1	20050113	US 2003-616709	20030710
WO 2005007131	A2	20050127	WO 2004-US20923	20040629
WO 2005007131	A3	20050922		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

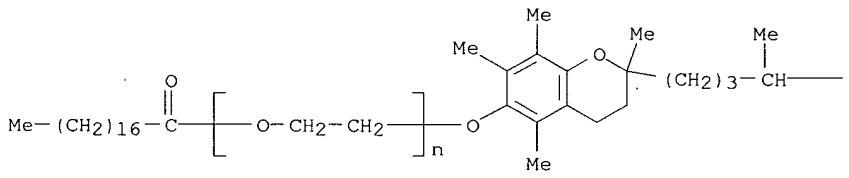
PRIORITY APPLN. INFO.: US 2003-616709 A 20030710

AB A sterile pharmaceutical composition for parenteral administration of propofol, said composition comprising propofol, optionally albumin, and less than about 10% by weight solvent for propofol, wherein said composition is stored in a container having a closure wherein said closure is inert to propofol. Formulations comprise propofol, soybean oil, egg lecithins, glycerin, NaOH, and water.

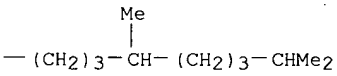
IT **823782-77-0**
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(propofol formulations with non-reactive container closures)

RN 823782-77-0 CAPLUS
CN Poly(oxy-1,2-ethanediyl), α-(1-oxooctadecyl)-ω-[(3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl)oxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



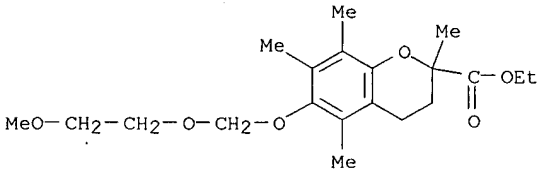
L11 ANSWER 5 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:967761 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 142:113978
TITLE: Development of a new class of potential antiatherosclerosis agents: NO-donor antioxidants
AUTHOR(S): Cena, Clara; Boschi, Donatella; Tron, Gian Cesare; Chegaev, Kostantin; Lazzarato, Loretta; Di Stilo, Antonella; Aragno, Manuela; Fruttero, Roberta; Gasco, Alberto
CORPORATE SOURCE: Dipartimento di Scienza e Tecnologia del Farmaco, Turin, I-10125, Italy
SOURCE: Bioorganic & Medicinal Chemistry Letters (2004), 14(24), 5971-5974
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 142:113978

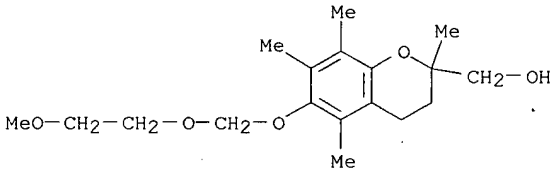
AB A new class of NO-donor phenol derivs., e.g. I, is described. The products were obtained by joining appropriate phenols with either nitrooxy or 3-phenylsulfonylfuroxan-4-yloxy moieties. All the compds. proved to inhibit the ferrous salt/ascorbate induced lipidic peroxidn. of membrane lipids of rat hepatocytes. They were also capable of dilating rat aorta strips precontracted with phenylephrine.

IT **820976-57-6P 820976-58-7P 820976-63-4P 820976-64-5P 820976-65-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(development of a new class of potential NO-donor antioxidants as antiatherosclerosis agents)

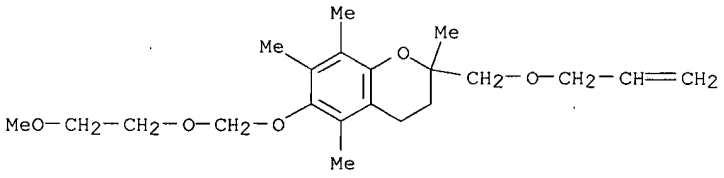
RN 820976-57-6 CAPLUS
CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-6-[(2-methoxyethoxy)methoxy]-2,5,7,8-tetramethyl-, ethyl ester (9CI) (CA INDEX NAME)



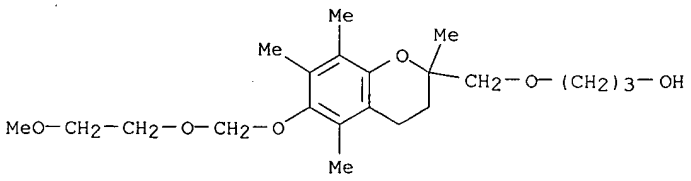
RN 820976-58-7 CAPLUS
CN 2H-1-Benzopyran-2-methanol, 3,4-dihydro-6-[(2-methoxyethoxy)methoxy]-2,5,7,8-tetramethyl- (9CI) (CA INDEX NAME)



RN 820976-63-4 CAPLUS
CN 2H-1-Benzopyran, 3,4-dihydro-6-[(2-methoxyethoxy)methoxy]-2,5,7,8-tetramethyl-2-[(2-propenyloxy)methyl]- (9CI) (CA INDEX NAME)

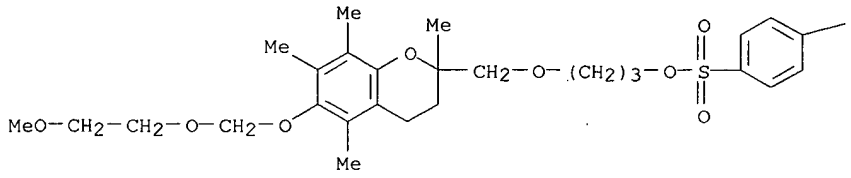


RN 820976-64-5 CAPLUS
CN 1-Propanol, 3-[[3,4-dihydro-6-[(2-methoxyethoxy)methoxy]-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]- (9CI) (CA INDEX NAME)



RN 820976-65-6 CAPLUS
CN 1-Propanol, 3-[[3,4-dihydro-6-[(2-methoxyethoxy)methoxy]-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-, 4-methylbenzenesulfonate (9CI) (CA INDEX NAME)

PAGE 1-A



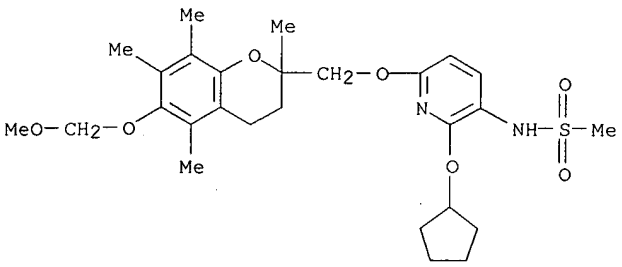
PAGE 1-B

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 6 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:873825 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 141:350039
TITLE: Preparation of chromans and their use as drugs
INVENTOR(S): Fujita, Takeshi; Oguchi, Minoru; Wada, Kunio; Fujiwara, Toshihiko; Ogawa, Junko; Kurakata, Shinichi; Inaoka, Yoshinori; Aratsu, Yoichi; Onosawa, Yoshiko
PATENT ASSIGNEE(S): Sankyo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 34 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004292331	A2	20041021	JP 2003-84624	20030326
PRIORITY APPLN. INFO.:			JP 2003-84624	20030326

OTHER SOURCE(S): MARPAT 141:350039
AB Chromans I [R1 = OH, C1-6 aliphatic acyloxy, nicotinoyloxy; A = CO, CH2, CHOH, etc.; B = CH2, CHOH; AB may be CH:CH; X = O, SOn; n = 0-2; Ar = benzene, pyridin, biphenylene ring; Q = H, halo, C1-6 (halo)alkyl, C1-6 alkoxy; R2 = H, C1-6 alkyl; Y = CO, SO2; R3 = C1-6 (halo)alkyl], their pharmacol. acceptable salts, or esters are prepared The chromans inhibit peroxylipid formation, 5-lipoxygenase, leucotrienes, and cytokines, and show antidiabetic, Ca-blocking, and nerve cell-protecting activities. Thus, amidation of 4-(6-acetoxy-2,5,7,8-tetramethylchroman-2-ylmethoxy)aniline with MeSO2Cl in pyridine gave I (R1 = AcO, R2, Q = H, R3 = Me, AB = CH2CH2, X = O, Ar = 1,4-C6H4, Y = SO2), which lowered blood sugar level by 20.1% in diabetic mice.
IT **776334-21-5**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of chromans as antidiabetic agents and nerve cell-protecting agents)
RN 776334-21-5 CAPLUS
CN Methanesulfonamide, N-[2-(cyclopentyloxy)-6-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-3-pyridinyl]- (9CI) (CA INDEX NAME)

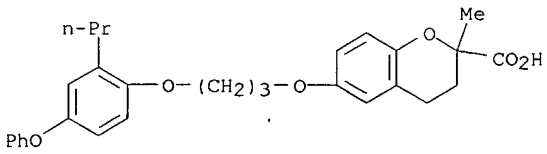


L11 ANSWER 7 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:369126 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 141:106341
TITLE: (2R)-2-Ethylchromane-2-carboxylic Acids: Discovery of Novel PPARα/γ Dual Agonists as Antihyperglycemic and Hypolipidemic Agents
AUTHOR(S): Koyama, Hiroo; Miller, Daniel J.; Boueres, Julia K.; Desai, Ranjit C.; Jones, A. Brian; Berger, Joel P.; MacNaul, Karen L.; Kelly, Linda J.; Doebber, Thomas W.; Wu, Margaret S.; Zhou, Gaochao; Wang, Pei-Ran; Ippolito, Marc C.; Chao, Yu-Sheng; Agrawal, Arun K.; Franklin, Ronald; Heck, James V.; Wright, Samuel D.; Moller, David E.; Sahoo, Soumya P.
CORPORATE SOURCE: Departments of Medicinal Chemistry, Metabolic Disorders Atherosclerosis and Endocrinology and Drug Metabolism, Merck Research Laboratories, Rahway, NJ, 07065-0900, USA
SOURCE: Journal of Medicinal Chemistry (2004), 47(12), 3255-3263
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 141:106341

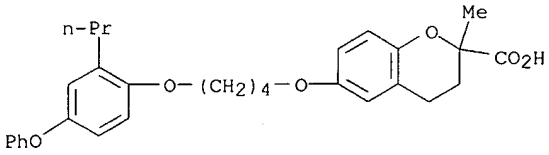
AB A series of chromane-2-carboxylic acid derivs. was synthesized and evaluated for PPAR agonist activities. A structure-activity relationship was developed toward PPARα/γ dual agonism. As a result, (2R)-7-{3-[2-chloro-4-(4-fluorophenoxy)phenoxy]propoxy}-2-ethylchromane-2-carboxylic acid (I) was identified as a potent, structurally novel, selective PPARα/γ dual agonist. I exhibited substantial antihyperglycemic and hypolipidemic activities when orally administered in three different animal models: the db/db mouse type 2 diabetes model, a Syrian hamster lipid model, and a dog lipid model.

IT **406488-53-7P 406488-55-9P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of chromane-2-carboxylic acid derivs. as PPARα/γ dual agonists)

RN 406488-53-7 CAPLUS
CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-2-methyl-6-[3-(4-phenoxy-2-propylphenoxy)propoxy]- (9CI) (CA INDEX NAME)



RN 406488-55-9 CAPLUS
CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-2-methyl-6-[4-(4-phenoxy-2-propylphenoxy)butoxy]- (9CI) (CA INDEX NAME)



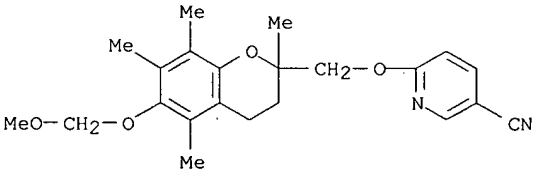
REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 8 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:94564 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 141:923
TITLE: Studies on some glitazones having pyridine as the linker unit
AUTHOR(S): Ramachandran, Uma; Mital, Alka; Bharatam, Prasad V.; Khanna, Smriti; Rao, Poduri Rama; Srinivasan, Krishnamoorthy; Kumar, Rakesh; Chawla, Harmander Pal Singh; Lal Kaul, Chaman; Raichur, Suryaprakash; Chakrabarti, Ranjan
CORPORATE SOURCE: Department of Pharmaceutical Technology, National Institute of Pharmaceutical Education and Research (NIPER), S.A.S. Nagar, 160 062, India
SOURCE: Bioorganic & Medicinal Chemistry (2004), 12(4), 655-662
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 141:923

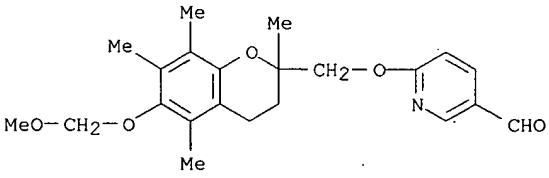
AB Mol. modeling on various well-known glitazones carrying a pyridine ring instead of benzene ring as the middle linker unit showed conformational rigidity as compared to their parent mols. Blocking the lone pair of electrons on the pyridine N, made them flexible once again. A few representatives of these analogs were synthesized and their efficacy as PPARγ agonists evaluated.

IT **695171-56-3P** **695171-57-4P** **695171-58-5P** **695171-59-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(glitazones having pyridine as the linker unit, their preparation and PPARγ agonist activity)

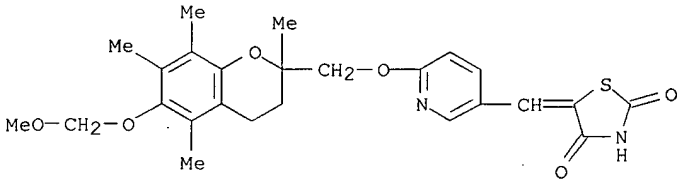
RN 695171-56-3 CAPLUS
CN 3-Pyridinecarbonitrile, 6-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]- (9CI) (CA INDEX NAME)



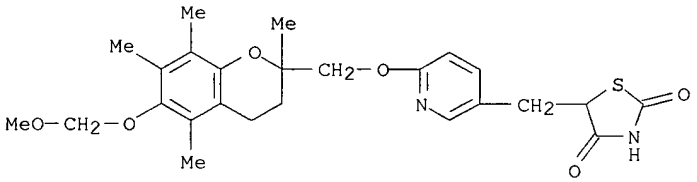
RN 695171-57-4 CAPLUS
CN 3-Pyridinecarboxaldehyde, 6-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]- (9CI) (CA INDEX NAME)



RN 695171-58-5 CAPLUS
CN 2,4-Thiazolidinedione, 5-[[6-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-3-pyridinyl]methylene]- (9CI) (CA INDEX NAME)



RN 695171-59-6 CAPLUS
CN 2,4-Thiazolidinedione, 5-[[6-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-3-pyridinyl]methyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 9 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:565648 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 139:122856
TITLE: Antioxidants for pharmaceutical and cosmetic use based on vitamin-(poly)phenol esters and method for preparation
INVENTOR(S): Oppenlaender, Knut
PATENT ASSIGNEE(S): Germany
SOURCE: Ger. Offen., 4 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10201223	A1	20030724	DE 2002-10201223	20020115
PRIORITY APPLN. INFO.:			DE 2002-10201223	20020115

AB The invention concerns the esterification of vitamins A, E, or C with (poly)phenols to obtain antioxidants that can be used in cosmetic and pharmaceutical products. Phenols with more than two OH groups, o- and p-quinones, flavones, flavonoids, catechins, quercetin, anthocyane, anthocyanidine and natural tannins are used as polyphenols. As monophenols α-tocopherol and 2,6-di-tert.butyl-p-cresole are preferred. A typical synthesis includes the formation of mono-Na-phenolate from the polyphenol, followed by reaction with chloroacetic acid; the produced monophenoxy-acetic acid is esterified with the OH-group of the vitamins during an acidic catalytic reaction.

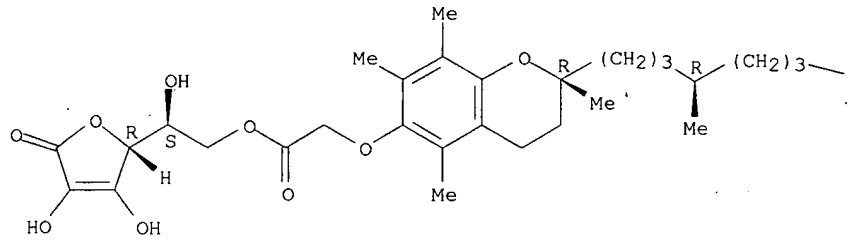
IT **564483-91-6P**
RL: COS (Cosmetic use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antioxidants for pharmaceutical and cosmetic use based on vitamin-(poly)phenol esters and method for preparation)

RN 564483-91-6 CAPLUS

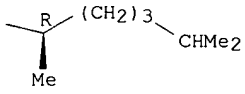
CN L-Ascorbic acid, 6-[[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]acetate] (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

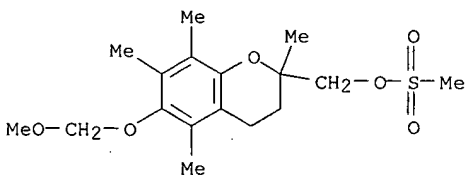


L11 ANSWER 10 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:144942 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 139:341528
TITLE: Structural studies on the impurities of troglitazone
AUTHOR(S): Moses Babu, J.; Nageshwar, D.; Ravindra Kumar, Y.; Prabhakar, C.; Sarma, M. R.; Om Reddy, G.; Vyas, K.
CORPORATE SOURCE: Department of Analytical Research, Discovery Research Division, Dr. Reddy's Laboratories Ltd., Hyderabad, 500050, India
SOURCE: Journal of Pharmaceutical and Biomedical Analysis (2003), 31(2), 271-281
CODEN: JPBADA; ISSN: 0731-7085
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

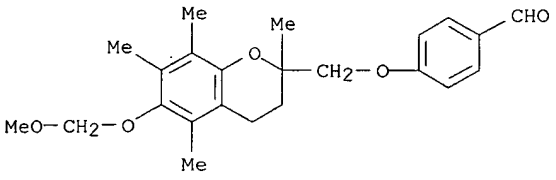
AB The impurity profile study of troglitazone has been carried out primarily by (liquid chromatog.-mass spectrometry) LC-MS. Four process-related impurities have been detected by LC-MS and were confirmed by co-injection with authentic samples. Apart from the process-related impurities, two polar byproducts were characterized by mass spectral data and comparison with reference samples, while one non-polar byproduct and one degradation product have been isolated by means of preparative HPLC and characterized by 2D NMR and mass spectral study. Single-crystal X-ray diffraction studies have been carried out on the degradation product. The formation and characterization of these byproducts and degradation product are discussed.

IT **218768-48-0P 616883-65-9P 616883-66-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(structural studies on the impurities of troglitazone)

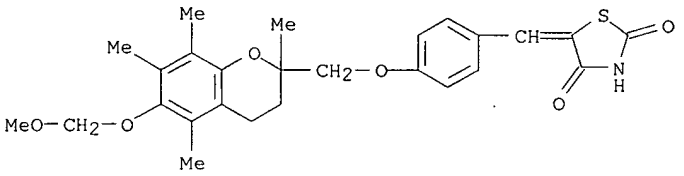
RN 218768-48-0 CAPLUS
CN 2H-1-Benzopyran-2-methanol, 3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-, methanesulfonate (9CI) (CA INDEX NAME)



RN 616883-65-9 CAPLUS
CN Benzaldehyde, 4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]- (9CI) (CA INDEX NAME)



RN 616883-66-0 CAPLUS
CN 2,4-Thiazolidinedione, 5-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]phenyl]methylene]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 11 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:754350 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 137:263203
TITLE: Preparation of carboxybenzopyran derivatives as surfactants
INVENTOR(S): Lambert, Karel J.; Lal, Manjari; Kaufman, Robert J.
PATENT ASSIGNEE(S): Sonus Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 57 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002076938	A2	20021003	WO 2002-US11266	20020321
WO 2002076938	A3	20030306		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

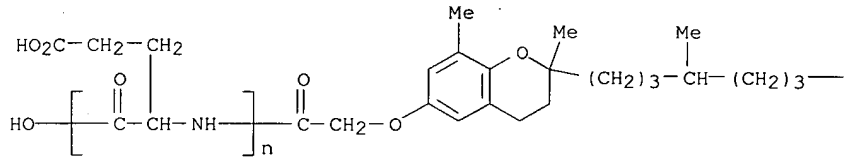
PRIORITY APPLN. INFO.: US 2001-278460P P 20010323
OTHER SOURCE(S): MARPAT 137:263203
AB Benzopyran derivs., e.g. of formula I [R1, R3, R4 = H, alkyl, carboxyl, OH; R2 = hydrophilic group; T1, T2 = H, Me, Et, isoprenyl, terpenyl, phytyl, trienyl]. are prepared The compds. are useful as surfactants, pharmaceutical emulsions, nanoemulsions, microemulsions, liposomes or micellar solns. Thus, II was prepared from dibenzyl L-glutamate p-toluenesulfonate and 6-O-D-δ-tocopheryl acetic acid ether. The surface tension of II was 41.0 dyne/cm.
IT **463331-13-7P 463331-15-9P 463331-17-1P**

RL: COS (Cosmetic use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of carboxybenzopyran derivs. as surfactants)

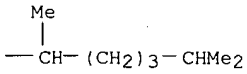
RN 463331-13-7 CAPLUS

CN Poly[imino[(1S)-1-(2-carboxyethyl)-2-oxo-1,2-ethanediyl]], α-[[[(2R)-3,4-dihydro-2,8-dimethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]acetyl]-ω-hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

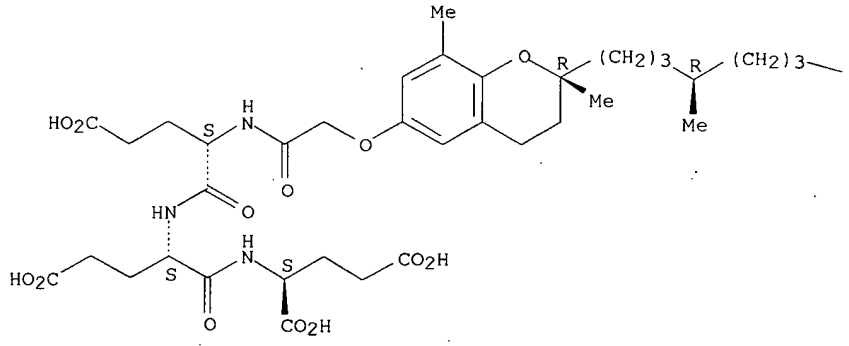


RN 463331-15-9 CAPLUS

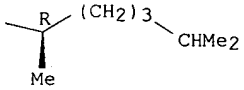
CN L-Glutamic acid, N-[[[(2R)-3,4-dihydro-2,8-dimethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]acetyl]-L-α-glutamyl-L-α-glutamyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

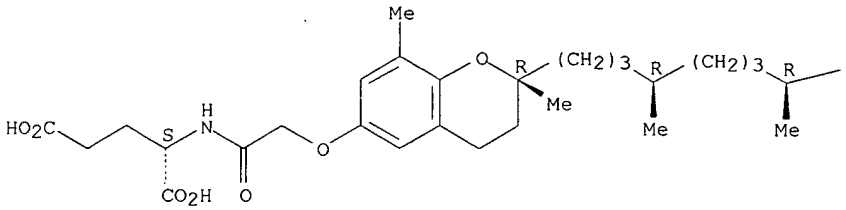


RN 463331-17-1 CAPLUS

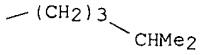
CN L-Glutamic acid, N-[[[(2R)-3,4-dihydro-2,8-dimethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

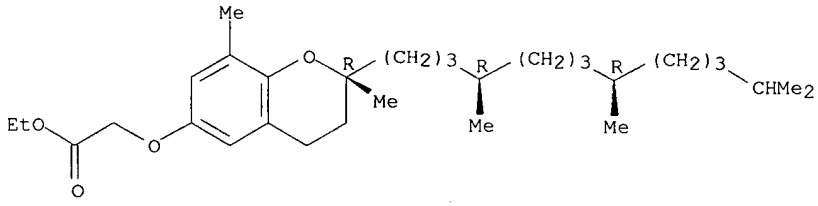


IT **463331-20-6P 463331-28-4P 463331-31-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of carboxybenzopyran derivs. as surfactants)

RN 463331-20-6 CAPLUS

CN Acetic acid, [[(2R)-3,4-dihydro-2,8-dimethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]-, ethyl ester (9CI) (CA INDEX NAME)

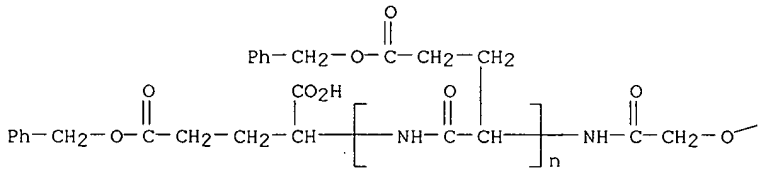
Absolute stereochemistry.



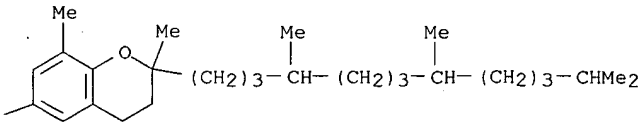
RN 463331-28-4 CAPLUS

CN Poly[imino[(2S)-1-oxo-2-[3-oxo-3-(phenylmethoxy)propyl]-1,2-ethanediyl]], α-[(1S)-1-carboxy-4-oxo-4-(phenylmethoxy)butyl]-ω-[[[[(2R)-3,4-dihydro-2,8-dimethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]acetyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



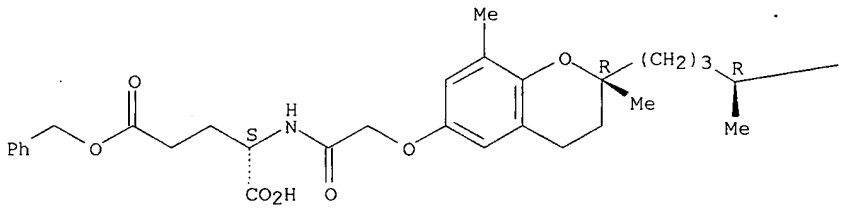
PAGE 1-B



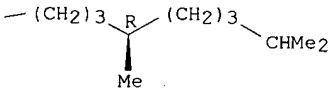
RN 463331-31-9 CAPLUS
CN L-Glutamic acid, N-[[[(2R)-3,4-dihydro-2,8-dimethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]acetyl]-, 5-(phenylmethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



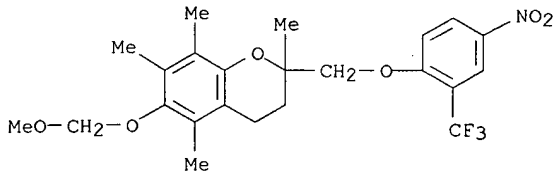
L11 ANSWER 12 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:728847 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 137:257628
TITLE: Antitumor agents containing novel chroman derivatives
INVENTOR(S): Fujita, Takashi; Wada, Kunio; Oguchi, Minoru; Kurakata, Shinichi
PATENT ASSIGNEE(S): Sankyo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 101 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002275064	A2	20020925	JP 2002-5560	20020115
PRIORITY APPLN. INFO.:			JP 2001-6574 A	20010115

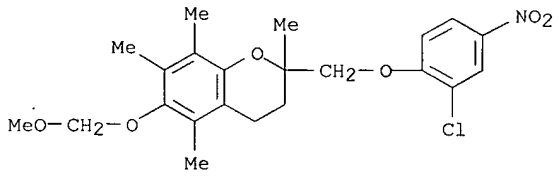
OTHER SOURCE(S): MARPAT 137:257628
AB The invention provides chroman derivs. I (R1 = H, C1-6 alkyl, etc.; R2 = H, C1-6 alkyl, etc.; R3, R4, R5, R6 = H, C1-6 alkyl, etc.; X = single bond, CO, C:NOR7, etc.; R7, R8 = H, C1-6 alkyl, C2-6 alkenyl, etc.; A = CO, SO2; U = CH2, etc.; Y = O, S; Q = H, nitro, OH, etc.; k = 1-6; m, n = 0-8; Ar1 = benzene ring, etc.; Ar2 = benzene ring, etc.) as antitumor agents. The antitumor effect of N-[2-[4-(6-acetoxy-4-oxo-2,5,7,8-tetramethylchroman-2-ylmethoxy)phenyl]ethyl]-nicotinamide in SK-N-MC and D283-Med cells was examined Also, a capsule containing N-[4-(6-acetoxy-2,5,7,8-tetramethylchroman-2-ylmethoxy)phenyl]-nicotinamide 100 mg was prepared
IT **321920-41-6P 321920-58-5P 321920-65-4P 321920-95-0P 321921-17-9P 461659-02-9P 461659-11-0P 461659-14-3P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of chroman derivs. as antitumor agents)

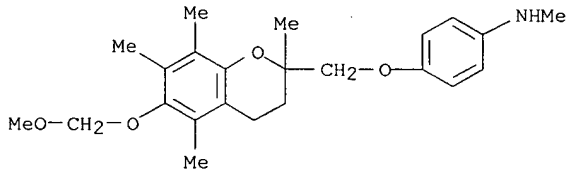
RN 321920-41-6 CAPLUS
CN 2H-1-Benzopyran, 3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2-[[4-nitro-2-(trifluoromethyl)phenoxy]methyl]- (9CI) (CA INDEX NAME)



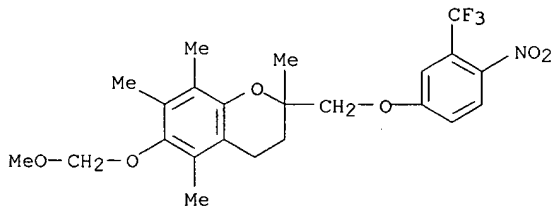
RN 321920-58-5 CAPLUS
CN 2H-1-Benzopyran, 2-[(2-chloro-4-nitrophenoxy)methyl]-3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl- (9CI) (CA INDEX NAME)



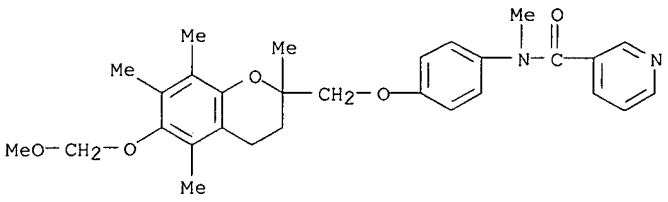
RN 321920-65-4 CAPLUS
CN Benzenamine, 4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-N-methyl- (9CI) (CA INDEX NAME)



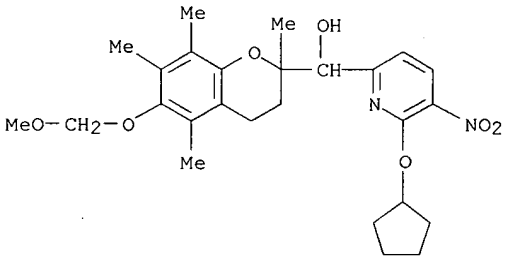
RN 321920-95-0 CAPLUS
CN 2H-1-Benzopyran, 3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2-[[4-nitro-3-(trifluoromethyl)phenoxy]methyl]- (9CI) (CA INDEX NAME)



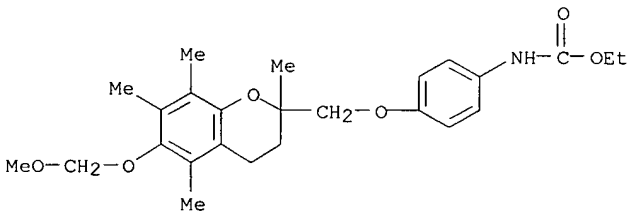
RN 321921-17-9 CAPLUS
CN 3-Pyridinecarboxamide, N-[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]phenyl]-N-methyl- (9CI) (CA INDEX NAME)



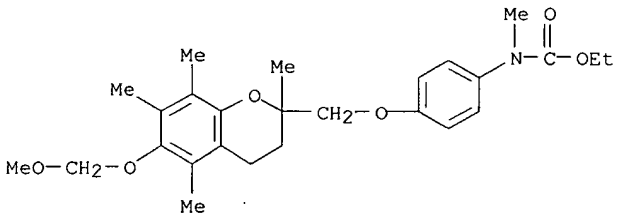
RN 461659-02-9 CAPLUS
CN 2-Pyridinemethanol, 6-(cyclopentyloxy)-α-[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]-5-nitro- (9CI) (CA INDEX NAME)



RN 461659-11-0 CAPLUS
CN Carbamic acid, [4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]phenyl]-, ethyl ester (9CI) (CA INDEX NAME)



RN 461659-14-3 CAPLUS
CN Carbamic acid, [4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]phenyl]methyl-, ethyl ester (9CI) (CA INDEX NAME)



L11 ANSWER 13 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:286703 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 136:309930
TITLE: Preparation of benzimidazole derivatives for treatment and prevention of diabetes
INVENTOR(S): Fujita, Takashi; Wada, Kunio; Koguchi, Minoru; Honma,

Eiji; Fujiwara, Toshihiko
PATENT ASSIGNEE(S): Sankyo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 135 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

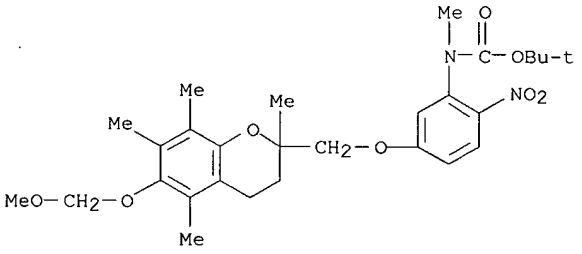
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002114781	A2	20020416	JP 2000-307157	20001006
PRIORITY APPLN. INFO.:			JP 2000-307157	20001006

OTHER SOURCE(S): MARPAT 136:309930

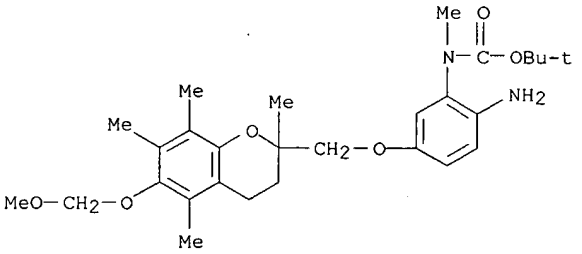
AB The title compds. I [R1 - R6 = H, alkyl, etc.; n, q = 1 - 5; Q, Y = O, S; X = CH2, etc.; Z = CH, N; A = (CH2)mCH(CO2H)BR7, etc.; B = O, etc.; R7 = H, alkyl, etc.; m = 0 - 8] are prepared Compds. of this invention at 0.01% in feed (given for 3 days) gave 34.9% to 66.7% decrease of blood sugar in diabetic KK mice.

IT **300666-00-6P 300666-01-7P 300666-02-8P**
300666-05-1P 300666-10-8P 300666-13-1P
300666-14-2P 300666-15-3P 300666-16-4P
300666-17-5P 300666-18-6P 300666-19-7P
300666-20-0P 300666-21-1P 300666-22-2P
300666-27-7P 300666-28-8P 300666-31-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of benzimidazole derivs. for treatment and prevention of diabetes)

RN 300666-00-6 CAPLUS
CN Carbamic acid, [5-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-nitrophenyl]methyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 300666-01-7 CAPLUS
CN Carbamic acid, [2-amino-5-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]phenyl]methyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 300666-02-8 CAPLUS
CN Carbamic acid, [5-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenoxy]acetyl]amino]phenyl]methyl-,

1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

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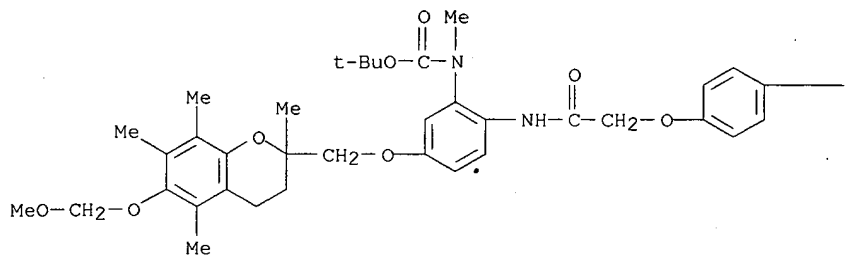

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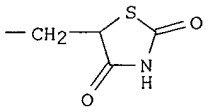

RN 300666-05-1 CAPLUS

CN Benzenepropanoic acid, 4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-α-(2,2,2-trifluoroethoxy)-, methyl ester (9CI) (CA INDEX NAME)

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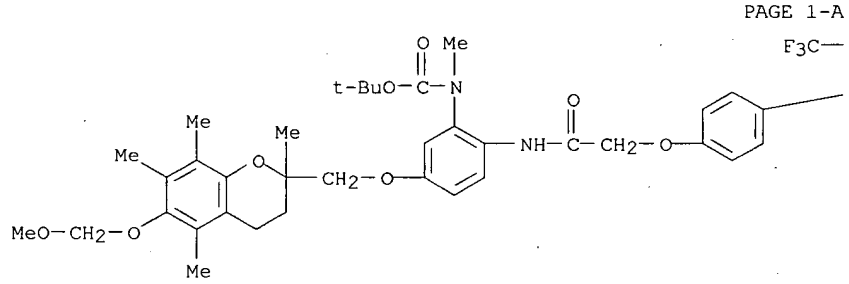

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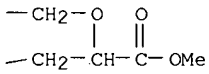

RN 300666-10-8 CAPLUS

CN Benzenepropanoic acid, 4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino}phenyl]amino]-2-oxoethoxy}-α-[[(4-fluorophenyl)methyl]thio}-, methyl ester (9CI) (CA INDEX NAME)

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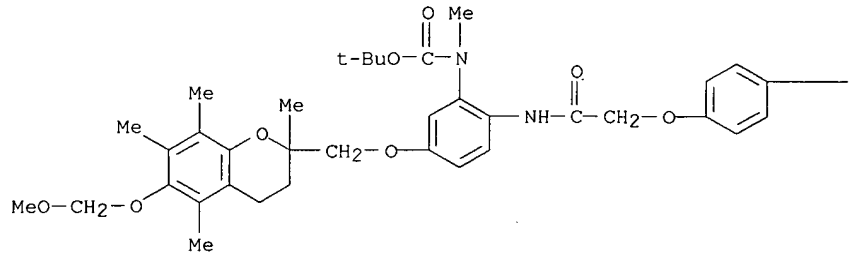

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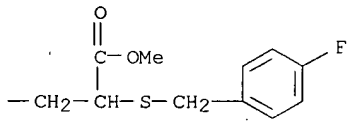

RN 300666-13-1 CAPLUS
CN Benzenepropanoic acid, 4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-α-hydroxy-, ethyl ester (9CI) (CA INDEX NAME)

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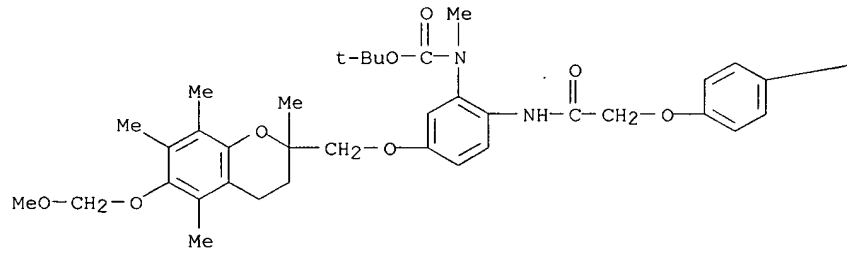

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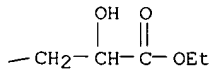

RN 300666-14-2 CAPLUS
CN Benzenepropanoic acid, 4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-α-(phenylthio)-, ethyl ester (9CI) (CA INDEX NAME)

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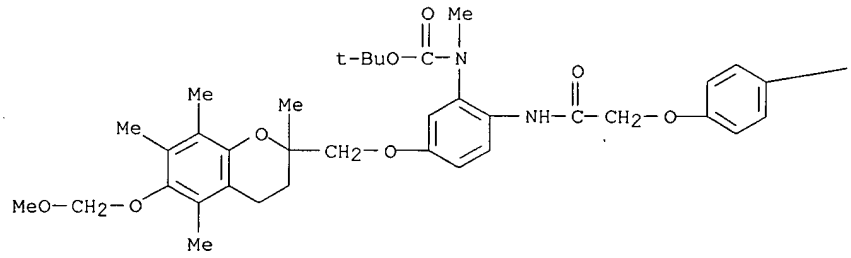

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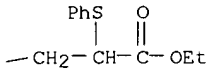

RN 300666-15-3 CAPLUS
CN Benzenepropanoic acid, 4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-α-[(4-nitrophenyl)thio]-, ethyl ester (9CI) (CA INDEX NAME)

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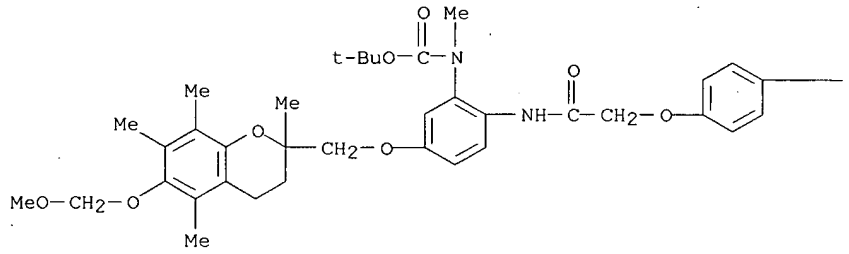

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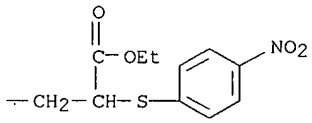

RN 300666-16-4 CAPLUS
CN Benzenepropanoic acid, α-(4-cyanophenoxy)-4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-, ethyl ester (9CI) (CA INDEX NAME)

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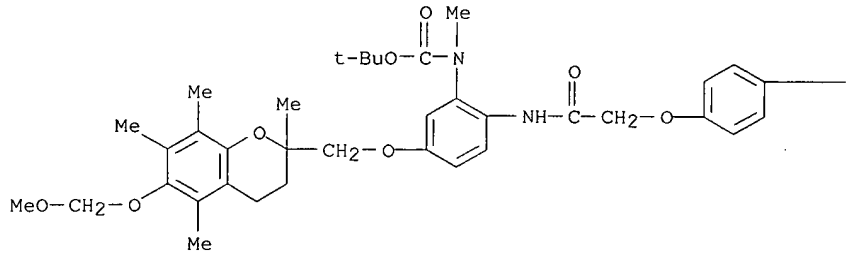

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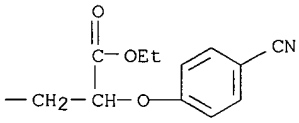

RN 300666-17-5 CAPLUS
CN Benzenepropanoic acid, 4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-α-[(4-methylphenyl)thio]-, ethyl ester (9CI) (CA INDEX NAME)

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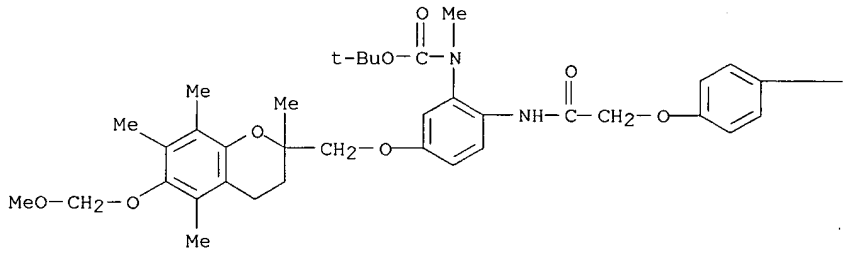

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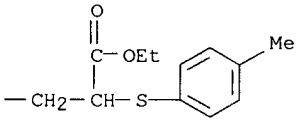

RN 300666-18-6 CAPLUS
CN Benzenepropanoic acid, α-[(4-chlorophenyl)thio]-4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-, ethyl ester (9CI) (CA INDEX NAME)

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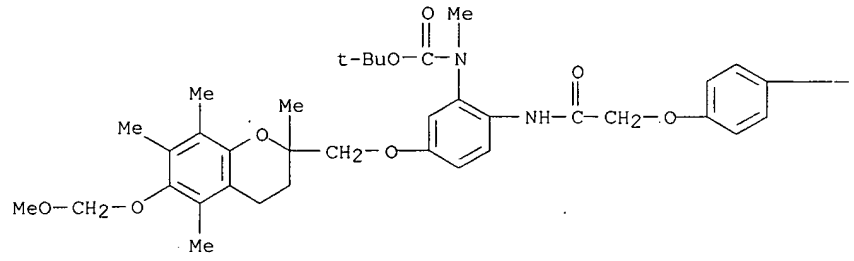

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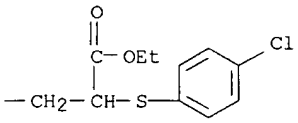

RN 300666-19-7 CAPLUS

CN Benzenepropanoic acid, 4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-α-[[4-(1,1-dimethylethyl)phenyl]thio]-, ethyl ester (9CI) (CA INDEX NAME)

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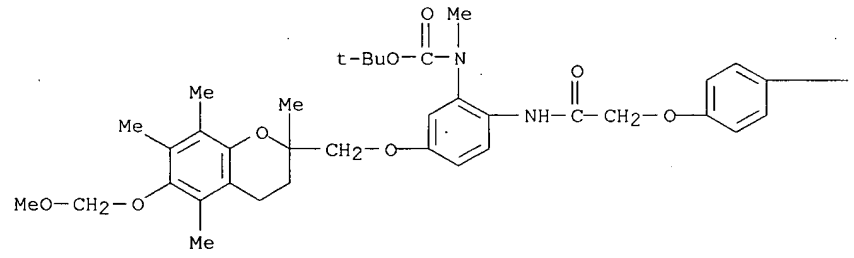

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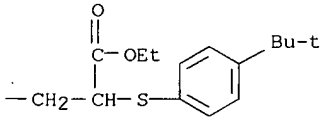

RN 300666-20-0 CAPLUS

CN Benzenepropanoic acid, 4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-α-[(4-methoxyphenyl)thio]-, ethyl ester (9CI) (CA INDEX NAME)

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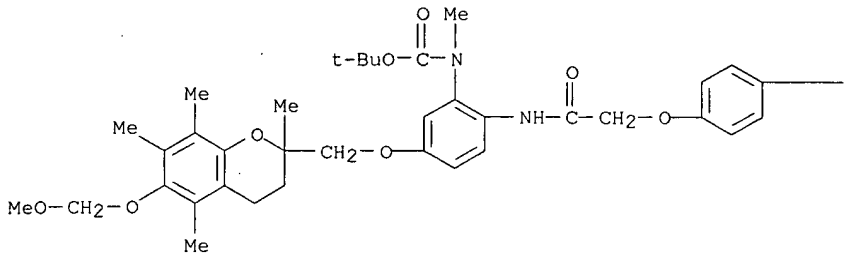

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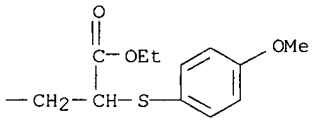

RN 300666-21-1 CAPLUS
CN Benzenepropanoic acid, 4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-α-ethoxy-, ethyl ester (9CI) (CA INDEX NAME)

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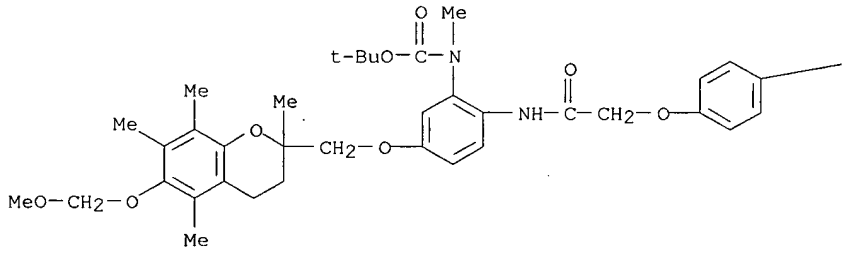

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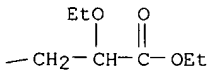

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CN Benzenepropanoic acid, 4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-α-[(4-fluorophenyl)methoxy]-, ethyl ester (9CI) (CA INDEX NAME)

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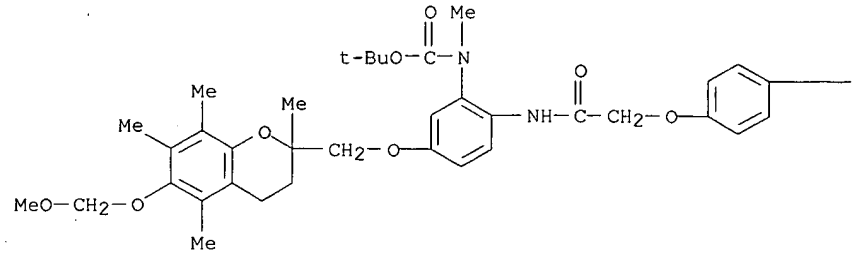

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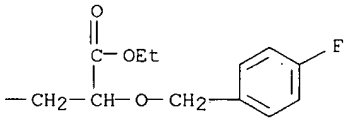

RN 300666-27-7 CAPLUS
CN Benzenepropanoic acid, 4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-α-phenoxy-, ethyl ester (9CI) (CA INDEX NAME)

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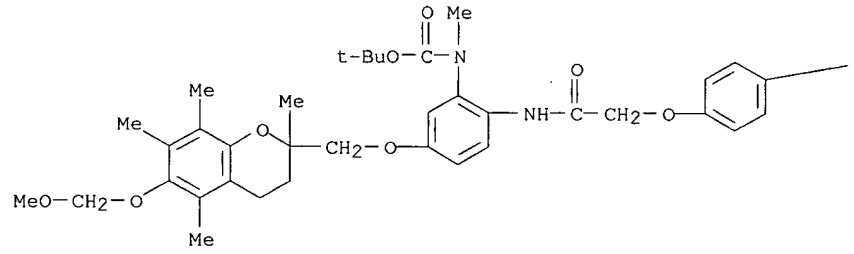

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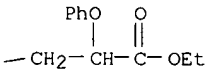

RN 300666-28-8 CAPLUS
CN Benzenepropanoic acid, 4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-α-(4-nitrophenoxy)-, ethyl ester (9CI) (CA INDEX NAME)

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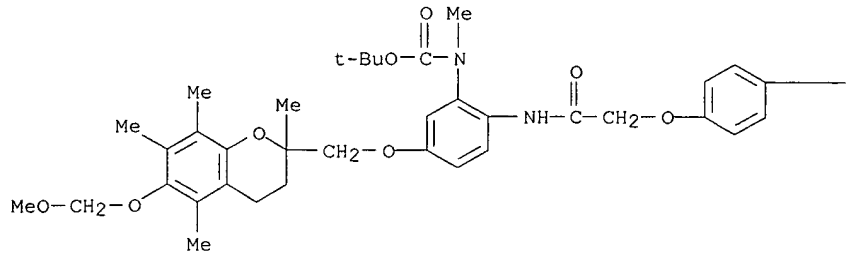

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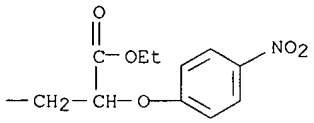

RN 300666-31-3 CAPLUS
CN Benzenepropanoic acid, α-[bis(4-fluorophenyl)methoxy]-4-[2-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-2-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]amino]-2-oxoethoxy]-, methyl ester (9CI) (CA INDEX NAME)

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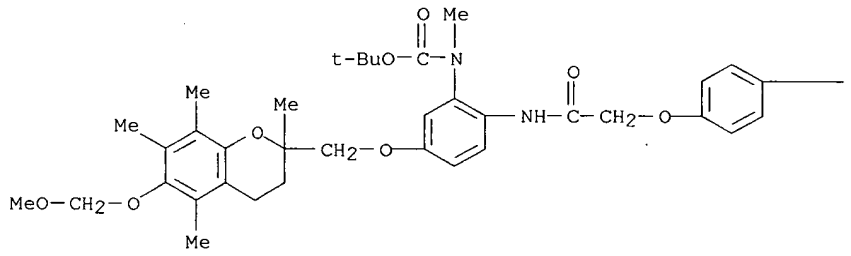

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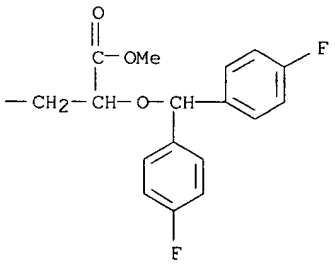

L11 ANSWER 14 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:242217 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 137:79092

TITLE: A method for thermal generation of aryloxyl radicals at ambient temperatures: application to low-density lipoprotein (LDL) oxidation
AUTHOR(S): Paul, Thomas; Ingold, Keith U.
CORPORATE SOURCE: National Research Council of Canada, Ottawa, ON, K1A 0R6, Can.
SOURCE: Angewandte Chemie, International Edition (2002), 41(5), 804-806
CODEN: ACIEF5; ISSN: 1433-7851
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 137:79092

AB The decomposition of aryloxyalkyl hyponitrites, ArOCH2ON:NOCH2OAr (I; Ar = Ph, α-tocopheryl), were measured by 1H-NMR and were found to be almost identical. The Arrhenius parameters for decomposition of I (Ar = Ph) were EA = 106 kJ/mol and log(A/S-1) = 14.8. The expected decomposition pathways for I are outlined. The aryloxy radical-initiated peroxidn. of LDL was chosen to illustrate a biol. relevant in vitro application of I.

IT **440361-13-7P**
RL: BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); PYP (Physical process); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)
(thermal decomposition of; thermal generation of aryloxyl radicals at ambient temps. and its application to low-d. lipoprotein oxidation)

RN 440361-13-7 CAPLUS
CN Hyponitrous acid, bis[[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]methyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

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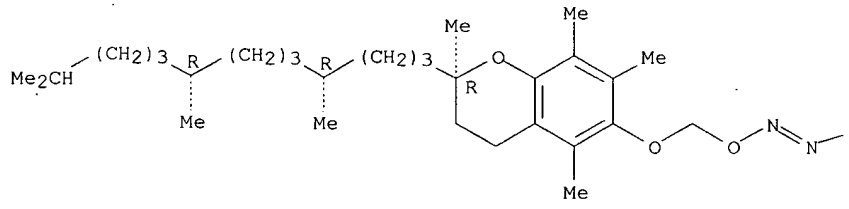
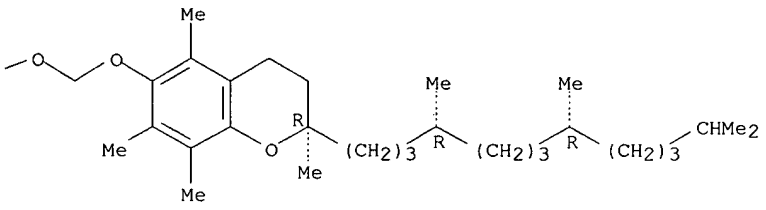


PAGE 1-B



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 15 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:170741 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 137:179813
TITLE: Powerful antioxidative agents based on garcinoic acid from Garcinia kola
AUTHOR(S): Terashima, Kenji; Takaya, Yoshiaki; Niwa, Masatake

CORPORATE SOURCE: Faculty of Pharmacy, Meijo University, Tempaku, Nagoya, 468-8503, Japan
SOURCE: Bioorganic & Medicinal Chemistry (2002), 10(5), 1619-1625
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

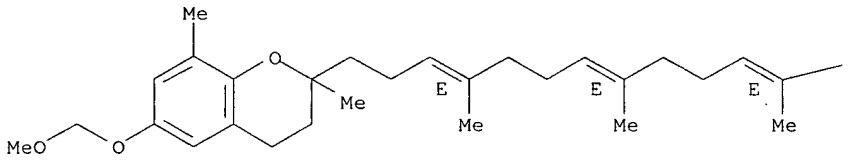
AB Investigation on the structure-antioxidative activity relationships of derivs. based on garcinoic acid from Garcinia kola (Guttiferae) led to discovery of a powerful antioxidative agent. Various chroman compds. based on garcinoic acid were prepared and tested for antioxidative activity. Compound I was 18.7 times more powerful antioxidant than dl-α-tocopherol.

IT **449775-65-9P 449775-66-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and structure activity relations of antioxidant garcinoic acid derivs.)

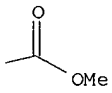
RN 449775-65-9 CAPLUS
CN 2,6,10-Tridecatrienoic acid, 13-[3,4-dihydro-6-(methoxymethoxy)-2,8-dimethyl-2H-1-benzopyran-2-yl]-2,6,10-trimethyl-, methyl ester, (2E,6E,10E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

PAGE 1-A



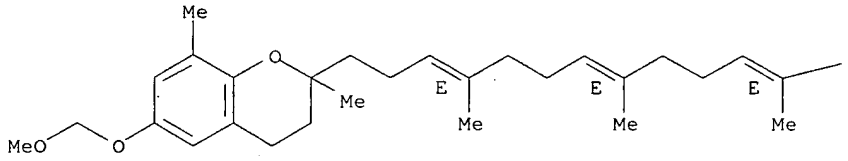
PAGE 1-B



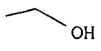
RN 449775-66-0 CAPLUS
CN 2,6,10-Tridecatrien-1-ol, 13-[3,4-dihydro-6-(methoxymethoxy)-2,8-dimethyl-2H-1-benzopyran-2-yl]-2,6,10-trimethyl-, (2E,6E,10E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 16 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:63989 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 134:131426
TITLE: Preparation and effect of coumarone analogues as antitumor agents
INVENTOR(S): Fujita, Takashi; Wada, Kunio; Oguchi, Minoru; Kurakata, Shinichi
PATENT ASSIGNEE(S): Sankyo Company, Ltd., Japan
SOURCE: PCT Int. Appl., 238 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

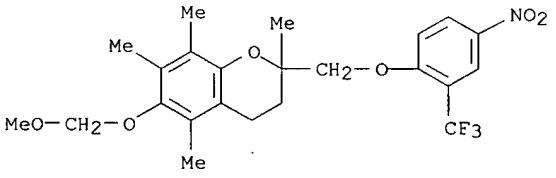
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001005780	A1	20010125	WO 2000-JP4732	20000714
W: AU, BR, CA, CN, CZ, HU, ID, IL, IN, KR, MX, NO, NZ, PL, RU, TR, US, ZA				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 2001089468	A2	20010403	JP 2000-213985	20000714
PRIORITY APPLN. INFO.:			JP 1999-203159 A	19990716

OTHER SOURCE(S): MARPAT 134:131426

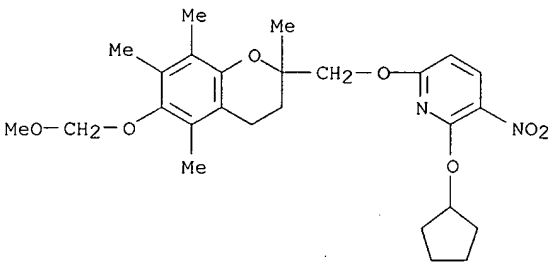
AB Title coumarone analogs [I; wherein R1 is hydrogen, C1-C6 alkyl; R2 is hydrogen, C1-C6 alkyl; R3, R5 are each independently hydrogen, C1-C6 alkyl; R4, R6 are each independently hydroxy, C1-6 alkyl, NH2, acetoxy, methoxymethoxy; X is a single bond, C=O, C=NOR7; R7 and R8 are each independently hydrogen, C1-C6 alkyl, C2-C6 alkenyl; A is C=O, SO2; U is CH2, or the like; Y is O or S; Q is hydrogen, nitro, hydroxyl; p is an integer of 1 to 6; m and n are each independently an integer of 0 to 8; and Ar1 and Ar2 are each benzene ring or pyridine ring] exhibiting excellent antitumor activities are prepared and formulation are discussed. Thus, title compound II was prepared and tested.

IT **321920-41-6P** **321920-54-1P** **321920-58-5P** **321920-65-4P** **321920-95-0P** **321921-17-9P** **321921-21-5P** **321921-30-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and effect of coumarone analogs as antitumor agents)

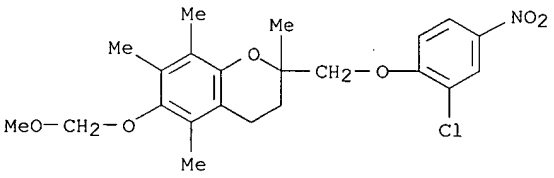
RN 321920-41-6 CAPLUS
CN 2H-1-Benzopyran, 3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2-[[4-nitro-2-(trifluoromethyl)phenoxy]methyl]- (9CI) (CA INDEX NAME)



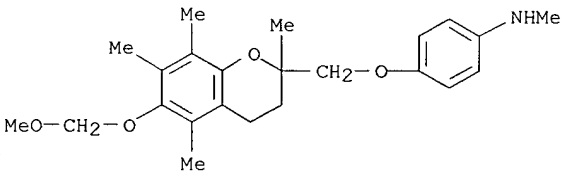
RN 321920-54-1 CAPLUS
CN Pyridine, 2-(cyclopentyloxy)-6-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-3-nitro- (9CI) (CA INDEX NAME)



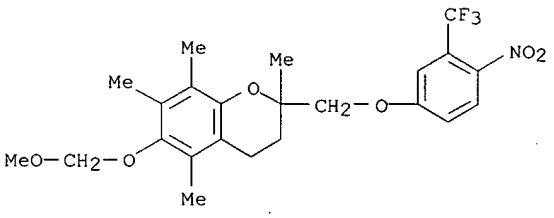
RN 321920-58-5 CAPLUS
CN 2H-1-Benzopyran, 2-[(2-chloro-4-nitrophenoxy)methyl]-3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl- (9CI) (CA INDEX NAME)



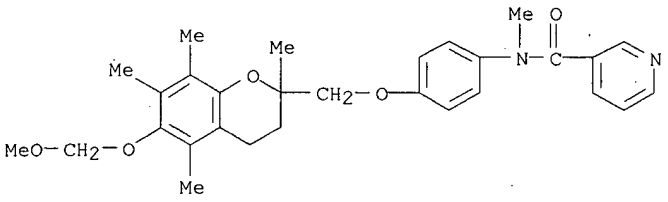
RN 321920-65-4 CAPLUS
CN Benzenamine, 4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-N-methyl- (9CI) (CA INDEX NAME)



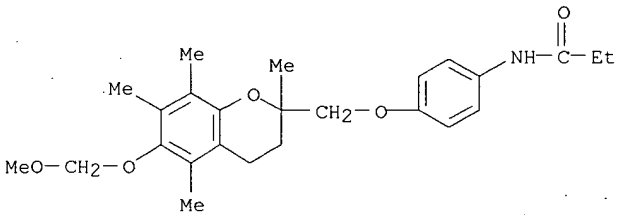
RN 321920-95-0 CAPLUS
CN 2H-1-Benzopyran, 3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2-[[4-nitro-3-(trifluoromethyl)phenoxy]methyl]- (9CI) (CA INDEX NAME)



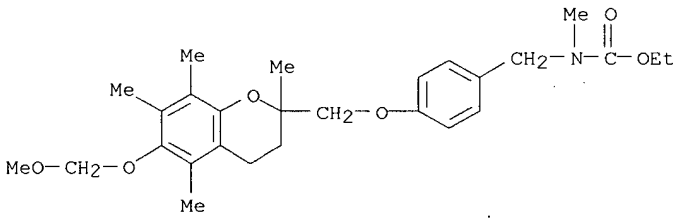
RN 321921-17-9 CAPLUS
CN 3-Pyridinecarboxamide, N-[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]phenyl]-N-methyl- (9CI) (CA INDEX NAME)



RN 321921-21-5 CAPLUS
CN Propanamide, N-[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]phenyl]- (9CI) (CA INDEX NAME)



RN 321921-30-6 CAPLUS
CN Carbamic acid, [[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]phenyl]methyl]methyl-, ethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 17 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:117059 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 132:171119
TITLE: Water-soluble prodrugs of hindered alcohols or phenols
INVENTOR(S): Stella, Valentino J.; Zygmunt, Jan J.; Georg, Ingrid Gunda; Safadi, Muhammed S.
PATENT ASSIGNEE(S): University of Kansas, USA
SOURCE: PCT Int. Appl., 76 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000008033	A1	20000217	WO 1999-US17779	19990806

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,

	CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6204257		B1	20010320	US 1998-131385	19980807
CA 2339834		AA	20000217	CA 1999-2339834	19990806
AU 9953394		A1	20000228	AU 1999-53394	19990806
AU 769755		B2	20040205		
EP 1102776		A1	20010530	EP 1999-939030	19990806
EP 1102776		B1	20060308		
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BR 9912853		A	20011030	BR 1999-12853	19990806
TR 200100772		T2	20011221	TR 2001-200100772	19990806
JP 2002522443		T2	20020723	JP 2000-563666	19990806
NZ 509795		A	20031031	NZ 1999-509795	19990806
IL 141316		A1	20040620	IL 1999-141316	19990806
RU 2235727		C2	20040910	RU 2001-106614	19990806
CN 1680402		A	20051012	CN 2005-10052494	19990806
AT 319723		E	20060315	AT 1999-939030	19990806
EP 1683803		A1	20060726	EP 2006-4146	19990806
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
US 2001025035		A1	20010927	US 2000-733817	20001208
US 6451776		B2	20020917		
NO 2001000659		A	20010406	NO 2001-659	20010207
ZA 2001001039		A	20020205	ZA 2001-1039	20010207
US 2003176324		A1	20030918	US 2002-208647	20020729
US 6872838		B2	20050329		
HK 1047939		A1	20051118	HK 2003-100006	20030102
US 2005090431		A1	20050428	US 2004-991348	20041117
PRIORITY APPLN. INFO.:				US 1998-131385	A 19980807
				CN 1999-811440	A3 19990806
				EP 1999-939030	A3 19990806
				WO 1999-US17779	W 19990806
				US 2000-733817	A3 20001208
				US 2002-208647	A3 20020729

OTHER SOURCE(S): MARPAT 132:171119

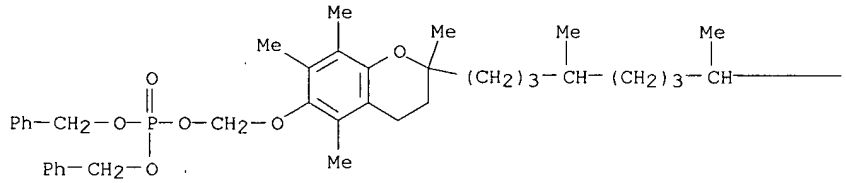
AB Water-soluble phosphonooxymethyl esters of drugs containing aliphatic or aromatic hindered OH groups are prepared as prodrugs to improve the bioavailability of the drugs without use of surfactants which lead to severe side effects. Among the drugs thus rendered water soluble are camptothecin, propofol, cyclosporin A, etoposide, and α-tocopherol. Thus, propofol was converted via its O-(methylthio)methyl, O-chloromethyl, and O-phosphonooxymethyl dibenzyl ester derivs. to O-phosphonooxymethylpropofol. This compound had a water solubility of .apprx.500 mg/mL, was nontoxic in rats, was converted to propofol by alkaline phosphatase in vitro, and produced anesthesia in dogs in a similar manner to a com. propofol formulation (Diprivan).

IT **258516-36-8P 258516-55-1P 258516-69-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(water-soluble prodrugs of hindered alcs. or phenols)

RN 258516-36-8 CAPLUS

CN Phosphoric acid, [[3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl]oxy]methyl bis(phenylmethyl) ester (9CI) (CA INDEX NAME)

PAGE 1-A

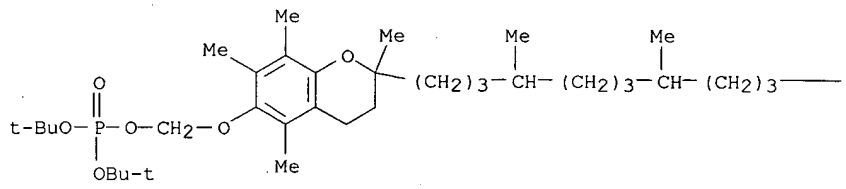


PAGE 1-B

—$(CH_2)_3$—$CHMe_2$

RN 258516-55-1 CAPLUS
CN Phosphoric acid, [[3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl]oxy]methyl bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

PAGE 1-A

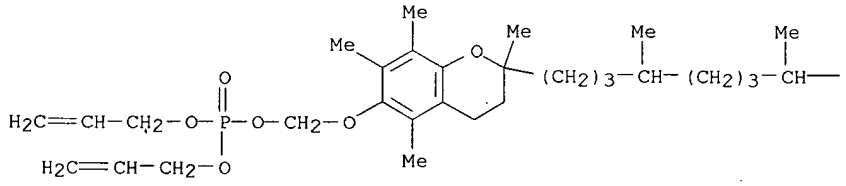


PAGE 1-B

—$CHMe_2$

RN 258516-69-7 CAPLUS
CN Phosphoric acid, [[3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl]oxy]methyl di-2-propenyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

—$(CH_2)_3$—$CHMe_2$

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

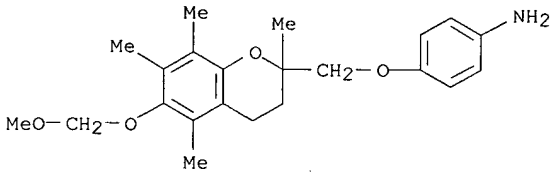
L11 ANSWER 18 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:753662 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 132:64206
TITLE: Synthesis of a new antidiabetic medicine 5-[4-[(6-hydroxy-2,5,7,8-tetramethylchroman-2-yl)methoxy]-benzyl]-2,4-thiazolidinedione
AUTHOR(S): Wang, Ensi; Duan, Haifeng; Jin, Lei
CORPORATE SOURCE: College of Life Science, Jilin University, Changchun,

130023, Peop. Rep. China
SOURCE: Jilin Daxue Ziran Kexue Xuebao (1999), (4), 85-90
CODEN: CLTTDI; ISSN: 0529-0279
PUBLISHER: Jilin Daxue Ziran Kexue Xuebao Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

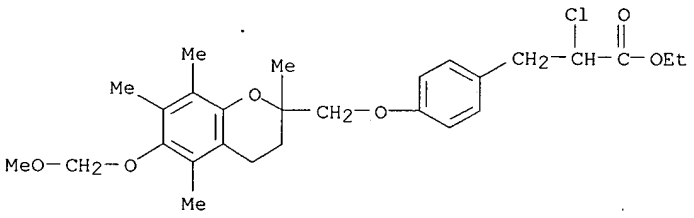
AB Troglitazone, 5-[4[(6-hydroxy-2,5,7,8-tetramethylchroman-2-yl)methoxy]-benzyl]-2,4-thiazolidinedione was prepared with 3.3% yield via Meerwein arylation as a pivotal step. The route without high pressure and high temperature may be applied to industrial production

IT **253273-69-7P** **253273-70-0P** **253273-71-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of 5-[4-[(6-hydroxy-2,5,7,8-tetramethylchroman-2-yl)methoxy]-benzyl]-2,4-thiazolidinedione as antidiabetic medicine)

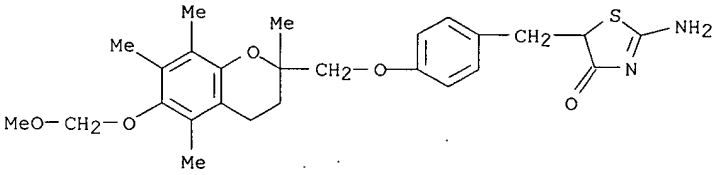
RN 253273-69-7 CAPLUS
CN Benzenamine, 4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]- (9CI) (CA INDEX NAME)



RN 253273-70-0 CAPLUS
CN Benzenepropanoic acid, α-chloro-4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]-, ethyl ester (9CI) (CA INDEX NAME)



RN 253273-71-1 CAPLUS
CN 4(5H)-Thiazolone, 2-amino-5-[[4-[[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]methoxy]phenyl]methyl]- (9CI) (CA INDEX NAME)



L11 ANSWER 19 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:56538 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 130:129977
TITLE: Nonionic vitamin E derivatives, method for their preparation, and polymeric amphiphilic vesicles prepared from them
INVENTOR(S): Kim, Young Dae; Lee, Jung No; Kim, Won Chae; Kim, Young Hyun; Kim, Min Ki; Ku, Myoung Su; Cho, Iw Han

PATENT ASSIGNEE(S): Pacific Corp., S. Korea
SOURCE: Ger. Offen., 10 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19747600	A1	19990114	DE 1997-19747600	19971028
DE 19747600	C2	20010726		
KR 195291	B1	19990615	KR 1997-32412	19970712
JP 11035577	A2	19990209	JP 1997-295644	19971028
JP 3061601	B2	20000710		
US 5869703	A	19990209	US 1997-959468	19971028
FR 2765873	A1	19990115	FR 1997-13564	19971029
FR 2765873	B1	20000114		
CN 1205333	A	19990120	CN 1997-119987	19971030
CN 1083449	B	20020424		

PRIORITY APPLN. INFO.: KR 1997-32412 A 19970712
OTHER SOURCE(S): CASREACT 130:129977; MARPAT 130:129977

AB Nonionic and polyethoxylated vitamin E derivs. (I; A = CH2CHMe, CH:CMe; B = Me in 5-, 7-, or 8-position; R = CH2:CR1CO2CH2CH2NMe; R1 = H, CH3; m = 1-3) are prepared which polymerize to form amphiphilic, liposome-like vesicles which show excellent thermodn. stability, biocompatibility, and antioxidant, antiinflammatory, and cytoprotectant activity and can be used as liposome substitutes in pharmaceutical and cosmetic prepns. Thus, vitamin E (DL-α-tocopherol) reacted with chloroacetic anhydride to form vitamin E chloroacetate, which was condensed with 2-(dimethylamino)ethyl methacrylate in anhydrous THF at 125° under reflux; the resulting monomer was polymerized under N2 at 65° in the presence of K2S2O8 to form ellipsoidal vesicles with major and minor diams. of 600-2300 and 300-1200 Å, resp. These vesicles were stable at room temperature for ≥8 mo and at 45° for >3 mo.

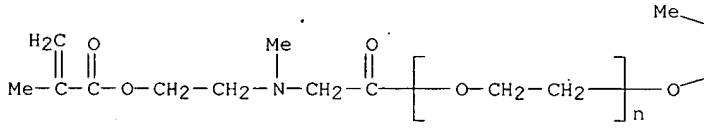
IT **219855-66-0P**
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(nonionic vitamin E derivs., method for their preparation, and polymeric amphiphilic vesicles prepared from them)

RN 219855-66-0 CAPLUS
CN Poly(oxy-1,2-ethanediyl), α-[[methyl[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]amino]acetyl]-ω-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]-, rel-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 219845-10-0
CMF (C2 H4 O)n C38 H63 N O5
CCI PMS

PAGE 1-A



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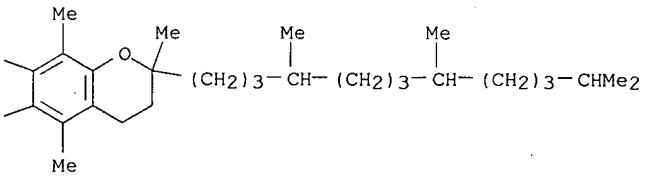
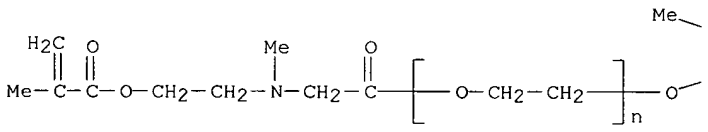


IT **219845-10-0P 219855-68-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(nonionic vitamin E derivs., method for their preparation, and polymeric amphiphilic vesicles prepared from them)

RN 219845-10-0 CAPLUS

CN Poly(oxy-1,2-ethanediyl), α-[[methyl[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]amino]acetyl]-ω-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]-, rel- (9CI) (CA INDEX NAME)

PAGE 1-A



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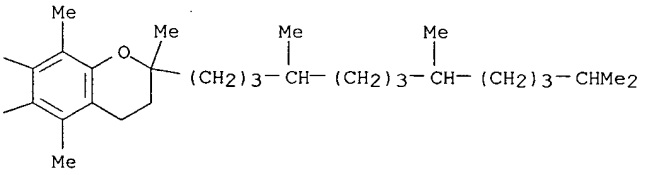
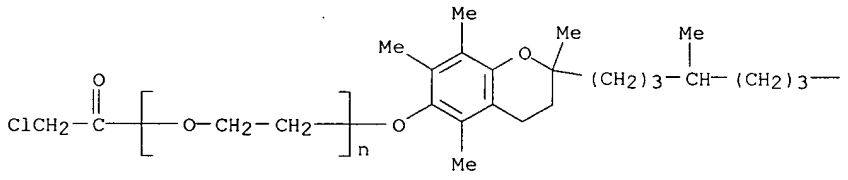


RN 219855-68-2 CAPLUS

CN Poly(oxy-1,2-ethanediyl), α-(chloroacetyl)-ω-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



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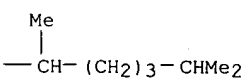
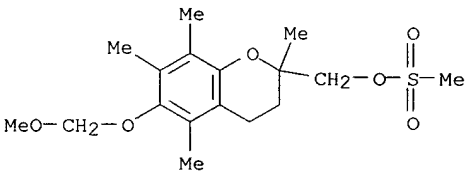


L11 ANSWER 20 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:710007 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 130:75735
TITLE: Synthesis and biological activity of novel thiazolidinediones
AUTHOR(S): Prabhakar, C.; Madhusudhan, G.; Sahadev, K.; Reddy, Ch. Maheedhara; Sarma, M. R.; Reddy, G. Om; Chakrabarti, R.; Rao, C. Seshagiri; Kumar, T. Dileep; Rajagopalan, R.
CORPORATE SOURCE: Department of Process Research and Development, Department of Pharmacology, Dr. Reddy's Research Foundation, Hyderabad, 500 050, India
SOURCE: Bioorganic & Medicinal Chemistry Letters (1998), 8(19), 2725-2730
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Novel compds. having a dual pharmacophore were synthesized and evaluated for their insulin sensitizer and anti-inflammatory properties in different animal models.
IT **218768-48-0**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation and structure activity of thiazolidinediones as antidiabetic and anti-inflammatory agents)
RN 218768-48-0 CAPLUS
CN 2H-1-Benzopyran-2-methanol, 3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-, methanesulfonate (9CI) (CA INDEX NAME)



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 21 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:150577 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 128:217521
TITLE: Antioxidant effects and synthesis of fluorine-containing vitamin E derivatives
AUTHOR(S): Koyama, Mayumi; Takaya, Hiroaki; Takagi, Toshiyuki; Ando, Akira; Kumaka, Takamaru; Sano, Mitsuaki; Tomita, Isao
CORPORATE SOURCE: Fac. Pharm., Setsunan Univ., Japan
SOURCE: Bitamin E Kenkyu no Shinpo (1998), 8, 66-70
CODEN: BKSHFT
PUBLISHER: Kyoritsu Shuppan
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB A total of 6 trifluoromethyl-substituted α-tocopherol derivs. (I; (a) R = R4 = R5 = R6 = Me, R1 = CF3 and R2 = Me or R1 = Me and R2 = CF3, R3 = H; (b) R = CF3, R1 = R2 = R4 = R5 = R6 = Me, R3 = H; (c) R = R1 = R2 = R5 = Me, R3 = H, R4 = CF3 and R6 = Me, or R4 = Me and R6 = CF3; (d) R = R1 = R4 = R6 = Me, R2 = R5 = CF3, R3 = H) were prepared and effect of trifluoromethyl substitution on antioxidant activity was studied. Thus, 4-hydroxy-2,5-dimethylphenol was condensed with a terpene alc. HOCH2CH:CMe(CH2)3CHMe(CH2)3CHMe(CH2)3CHMe2 in formic acid to give I (R = R1 = R3 = H, R2 = R4 = R5 = R6 = Me) which was acetylated by Ac2O in pyridine and brominated by Br to give I (R = R2 = R4 = R5 = R6 = Me, R1 = Br, R3 = Ac). The latter compound was coupled with CF3I in the presence of Cu followed by treatment with HCl/MeOH to give I (R = R2 = R4 = R5 = R6 = Me, R1 = CF3, R3 = H) (7-CF3-α-tocopherol). Antioxidant activity of these derivs. were assayed and, e.g., 7-CF3-α-tocopherol showed IC50

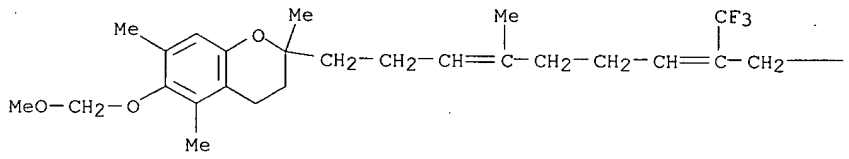
of 2.11+10-1 and 1.91+10-3 M by MI-HPTLC (α-methylindole-high-performance TLC) and brain-TBA (thiobarbituric acid) method, resp., compared to 7.82+10-5 and 5.88+10-5 M, resp., for dl-α-tocopherol. Introduction of a CF3 group to the chroman ring stabilizes α-tocopherol against oxidation due to the electron withdrawing effect of CF3 group and lowers antioxidant activity but is expected to exhibit long lasting effect. Substitution of Me groups on the side chain with CF3 group showed slightly higher antioxidant activity than that of dl-α-tocopherol.

IT **171566-85-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(antioxidant effects and synthesis of trifluoromethyl-substituted vitamin E derivs.)

RN 171566-85-1 CAPLUS

CN 2H-1-Benzopyran, 2-[4,12-dimethyl-8-(trifluoromethyl)-3,7,11-tridecatrienyl]-3,4-dihydro-6-(methoxymethoxy)-2,5,7-trimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

—CH2—CH=CMe2

L11 ANSWER 22 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:150496 CAPLUS <<LOGINID::20061025>>

DOCUMENT NUMBER: 128:217520

TITLE: Synthesis of α-tocopherol derivatives with 2 trifluoromethyl radicals

AUTHOR(S): Koyama, Mayumi; Takagi, Toshiyuki; Ando, Akira; Kumakai, Takamaru

CORPORATE SOURCE: Fac. Pharm., Setsunan Univ., Japan

SOURCE: Bitamin E Kenkyu no Shinpo (1996), 6, 1-5
CODEN: BKSHFT

PUBLISHER: Kyoritsu Shuppan

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

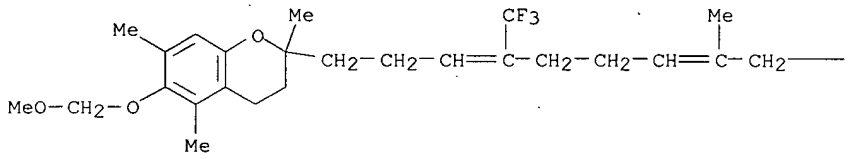
AB A total of 9 possible regioisomers of α-tocopherol derivs. having two trifluoromethyl groups [I; e.g., R = H; (1) R1 = R2 = R5 = R6 = Me, R3 = R4 = CF3; (2) R1 = R5 = CF3, R2 = R3 = R4 = R6 = Me; (3) R1 = R4 = R5 = Me, R2 = R6 = CF3, etc.] were prepared by Wittig reaction of [3-(2-chromanyl)propyl]triphenylphosphonium iodide [II; (a) R1 = R2 = Me, R3 = H; (b) R1 = H, R2 = R3 = Me; (c) R1 = R3 = Me, R2 = H, etc.] with terpene ketone R4COCH2CH2CH:CR5CH2CH2CH:CR6Me [(d) R4 = CF3, R5 = R6 = Me; (e) R4 = R6 = Me, R5 = CF3; and (f) R4 = R5 = Me, R6 = CF3] in the presence of a base, hydrogenation of the resulting (III; R1 - R6 = same as above) followed by acetylation to give I [e.g., R = Ac; (1) R1 = R2 = R5 = R6 = Me, R3 = H, R4 = CF3; (2) R1 = H, R5 = CF3, R2 = R3 = R4 = R6 = Me; (3) R1 = R4 = R5 = Me, R2 = H, R6 = CF3, etc.], halogenation of the latter compds. to give I [e.g., R = Ac; (1) R1 = R2 = R5 = R6 = Me, R3 = X, R4 = CF3; (2) R1 = X, R5 = CF3, R2 = R3 = R4 = R6 = Me; (3) R1 = R4 = R5 = Me, R2 = X, R6 = CF3, etc.; X = Br, iodo] followed by coupling with CF3I in the presence of Cu in HMPA to give I [e.g., R = Ac; (1) R1 = R2 = R5 = R6 = Me, R3 = R4 = CF3; (2) R1 = R5 = CF3, R2 = R3 = R4 = R6 = Me; (3) R1 = R4 = R5 = Me, R2 = R6 = CF3, etc.], and finally acid hydrolysis of the latter acetate (no specific examples given). These derivs. are used to study orientation and mobility of vitamin E in biomembranes by measuring

relaxation time of 19F-NMR. Introduction of a CF3 group in both the chromanol ring and the side chain enables the measurement of relaxation time in both sites in one preparation of liposome and thus provides more accurate comparison on the behavior of the side chain and the chromanol ring in liposome.

IT **171566-84-0P 171566-85-1P 171566-86-2P 171566-87-3P 171566-88-4P 171566-89-5P 171566-90-8P 171566-91-9P 171566-92-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of α-tocopherol derivs. with 2 trifluoromethyl radicals)

RN 171566-84-0 CAPLUS
CN 2H-1-Benzopyran, 2-[8,12-dimethyl-4-(trifluoromethyl)-3,7,11-tridecatrienyl]-3,4-dihydro-6-(methoxymethoxy)-2,5,7-trimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



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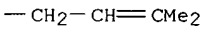
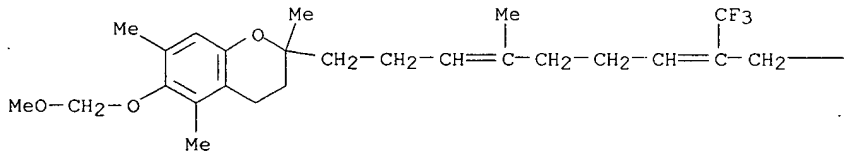


RN 171566-85-1 CAPLUS
CN 2H-1-Benzopyran, 2-[4,12-dimethyl-8-(trifluoromethyl)-3,7,11-tridecatrienyl]-3,4-dihydro-6-(methoxymethoxy)-2,5,7-trimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



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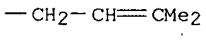
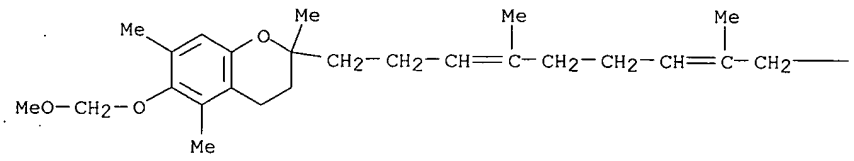


RN 171566-86-2 CAPLUS
CN 2H-1-Benzopyran, 2-[4,8-dimethyl-12-(trifluoromethyl)-3,7,11-tridecatrienyl]-3,4-dihydro-6-(methoxymethoxy)-2,5,7-trimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



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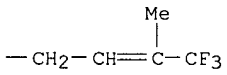
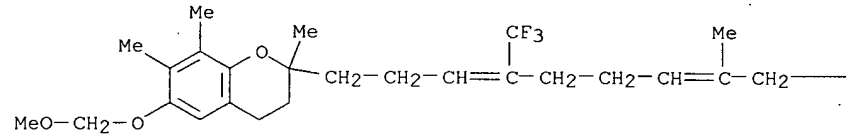


RN 171566-87-3 CAPLUS
CN 2H-1-Benzopyran, 2-[8,12-dimethyl-4-(trifluoromethyl)-3,7,11-tridecatrienyl]-3,4-dihydro-6-(methoxymethoxy)-2,7,8-trimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



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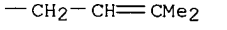
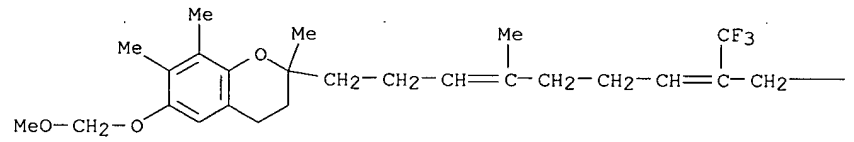


RN 171566-88-4 CAPLUS
CN 2H-1-Benzopyran, 2-[4,12-dimethyl-8-(trifluoromethyl)-3,7,11-tridecatrienyl]-3,4-dihydro-6-(methoxymethoxy)-2,7,8-trimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



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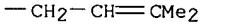
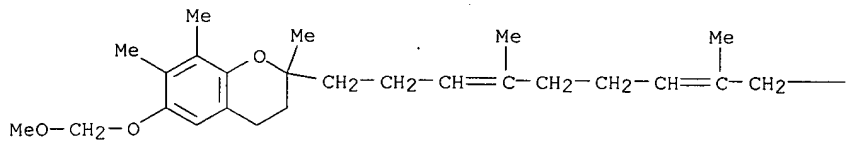


RN 171566-89-5 CAPLUS
CN 2H-1-Benzopyran, 3,4-dihydro-6-(methoxymethoxy)-2,7,8-trimethyl-2-(13,13,13-trifluoro-4,8,12-trimethyl-3,7,11-tridecatrienyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



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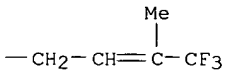
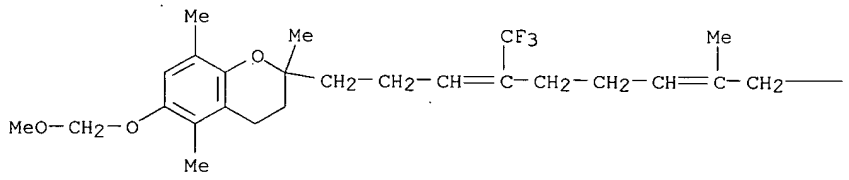


RN 171566-90-8 CAPLUS
CN 2H-1-Benzopyran, 2-[8,12-dimethyl-4-(trifluoromethyl)-3,7,11-tridecatrienyl]-3,4-dihydro-6-(methoxymethoxy)-2,5,8-trimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



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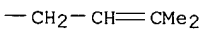
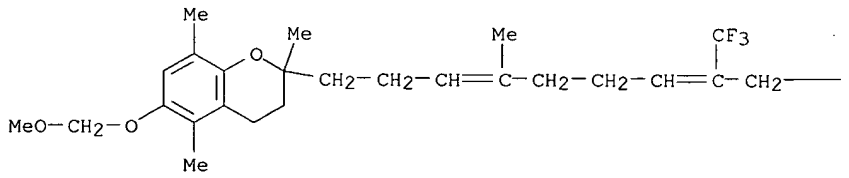


RN 171566-91-9 CAPLUS
CN 2H-1-Benzopyran, 2-[4,12-dimethyl-8-(trifluoromethyl)-3,7,11-tridecatrienyl]-3,4-dihydro-6-(methoxymethoxy)-2,5,8-trimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



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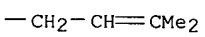
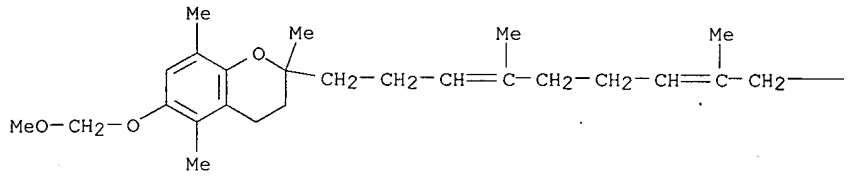


RN 171566-92-0 CAPLUS
CN 2H-1-Benzopyran, 3,4-dihydro-6-(methoxymethoxy)-2,5,8-trimethyl-2-(13,13,13-trifluoro-4,8,12-trimethyl-3,7,11-tridecatrienyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



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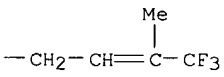
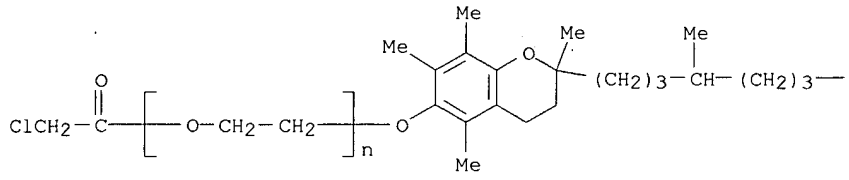


L11 ANSWER 23 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:103203 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 128:154498
TITLE: Formation of stable polymeric vesicles by tocopherol-containing amphiphiles
AUTHOR(S): Cho, Iwhan; Kim, Young Dae
CORPORATE SOURCE: Department Advanced Materials Engineering, Korea Advanced Institute Science Technology, Seoul, 130, S. Korea
SOURCE: Macromolecular Rapid Communications (1998), 19(1), 27-30
CODEN: MRCOE3; ISSN: 1022-1336
PUBLISHER: Huethig & Wepf Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Polymeric vesicles were obtained by a free radical polymerization of aqueous dispersions of a tocopherol-containing nonionic single-chain amphiphile synthesized by the reaction of O-tocopheryl-oligo(oxyethylene) chloroacetate and 2-(N,N-dimethylamino)ethyl methacrylate. Weight-average molar masses (.hivin.Mw) of the polymeric vesicles estimated by gel permeation chromatog. are in the range of 75,000-115,000. The phase transition temperature (Tc) of the polymeric vesicles is 77°, which is higher than that of the monomeric vesicles, 51°. Transmission electron microscopy photographs show that the polymerization of monomeric vesicles of the tocopherol-containing nonionic single-chain amphiphile leads to the formation of mostly polymeric, elliptic vesicles of distinct morphol. having short axes of ≈300-1200 Å and long axes of ≈600-2400 Å.
The polymeric vesicles exhibit an enhanced stability compared with their monomeric counterparts.

IT **202748-08-1DP**, reaction products with (dimethylamino)ethyl methacrylate **202748-08-1P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and vesicles formation of tocopherol-containing amphiphiles)
RN 202748-08-1 CAPLUS
CN Poly(oxy-1,2-ethanediyl), α-(chloroacetyl)-ω-[(3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl)oxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



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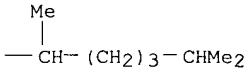
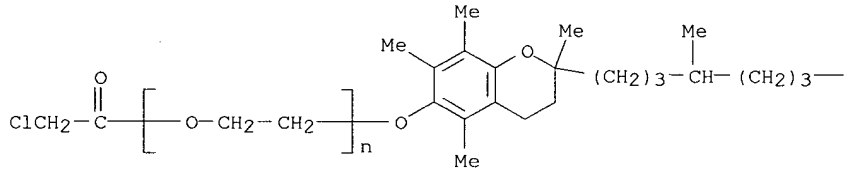
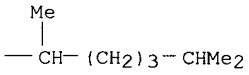


RN 202748-08-1 CAPLUS
CN Poly(oxy-1,2-ethanediyl), α-(chloroacetyl)-ω-[(3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl)oxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L11 ANSWER 24 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:754352 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 128:82201
TITLE: Chroman compound and diazo thermal recording material with improved light resistance using it
INVENTOR(S): Yamada, Hisao; Matsushita, Tetsunori; Sano, Shojiro
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 29 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09301969	A2	19971125	JP 1996-120528	19960515
PRIORITY APPLN. INFO.:			JP 1996-120528	19960515

OTHER SOURCE(S): MARPAT 128:82201
AB The chroman compound comprises I [R = aminocarbonyl, acylamino, aminocarboxy, aminocarbamoyl, sulfonamide, sulfonylaminocarboxy, sulfonylaminocarbamoyl, OH, acyloxy, alkoxycarbonyl, amino; R1-3 = H, halo, (substituted) alkyl, alkoxy, alkylthio; Y = divalent group; Z = atomic group required to form chroman or coumaran ring]. The material has a

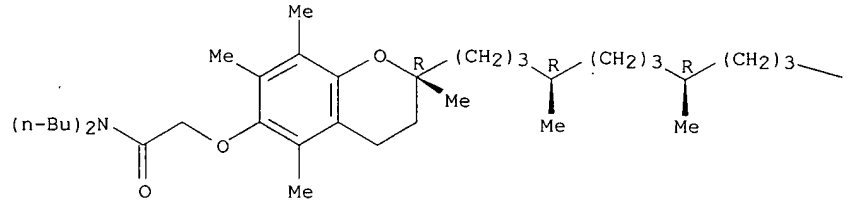
heat-sensitive layer containing a diazo compound, a coupler, and I. The material showed improved light resistance.

IT **200701-51-5 200701-52-6 200701-55-9 200701-56-0 200701-57-1**
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(chroman compound for coupler of diazo thermal recording material with improved light resistance)

RN 200701-51-5 CAPLUS
CN Acetamide, N,N-dibutyl-2-[[3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl]oxy]-, [2R-[2R*(4R*,8R*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

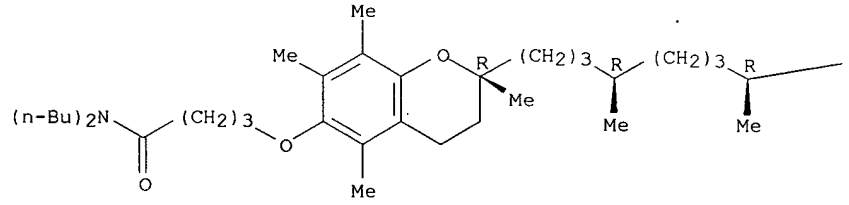


PAGE 1-B

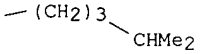
RN 200701-52-6 CAPLUS
CN Butanamide, N,N-dibutyl-4-[[3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl]oxy]-, [2R-[2R*(4R*,8R*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



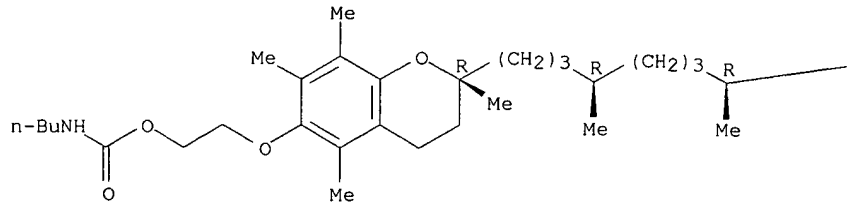
PAGE 1-B



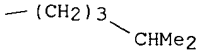
RN 200701-55-9 CAPLUS
CN Carbamic acid, butyl-, 2-[[3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl]oxy]ethyl ester, [2R-[2R*(4R*,8R*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



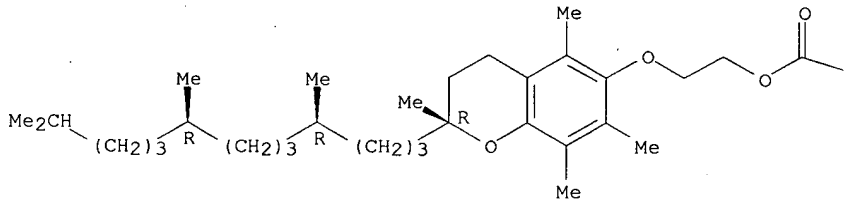
PAGE 1-B



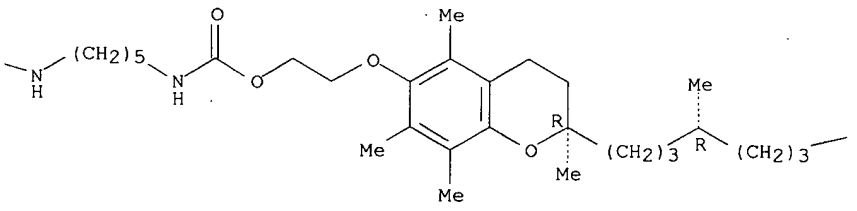
RN 200701-56-0 CAPLUS
CN Carbamic acid, 1,5-pentanediylbis-, bis[2-[[3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl]oxy]ethyl] ester, [2R-[2R*(4R*,8R*),6[R*(4R*,8R*)]]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

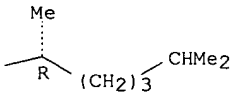
PAGE 1-A



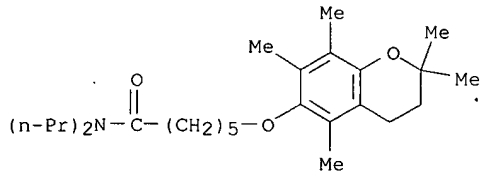
PAGE 1-B



PAGE 1-C



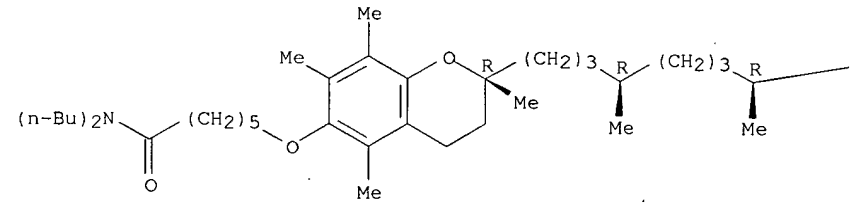
RN 200701-57-1 CAPLUS
CN Hexanamide, 6-[(3,4-dihydro-2,2,5,7,8-pentamethyl-2H-1-benzopyran-6-yl)oxy]-N,N-dipropyl- (9CI) (CA INDEX NAME)



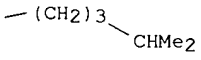
IT **200701-53-7P**
RL: DEV (Device component use); MOA (Modifier or additive use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(chroman compound for coupler of diazo thermal recording material with improved light resistance)
RN 200701-53-7 CAPLUS
CN Hexanamide, N,N-dibutyl-6-[[3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl]oxy]-, [2R-[2R*(4R*,8R*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L11 ANSWER 25 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:594559 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 127:234257
TITLE: Preparation of 3-hydroxy-4-aminomethylpyridine derivative as Maillard reaction inhibitors
INVENTOR(S): Iyobe, Ryo; Kamata, Koji; Yazaki, Toshikazu; Fujikura, Hideki; Kasai, Kiyoshi; Harada, Hiroshi; Sato, Fumiyasu
PATENT ASSIGNEE(S): Kissei Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09221473	A2	19970826	JP 1996-325824	19961030
PRIORITY APPLN. INFO.:			JP 1995-354960 A	19951030
OTHER SOURCE(S):	MARPAT 127:234257			

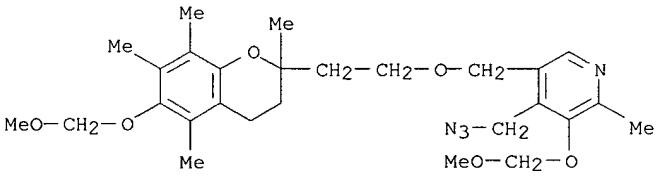
AB The title compds. [I; R1 - R3 = H, lower alkyl; A = lower alkylene; B = alkylene, alkenylene, alkynylene; R = H, OH, lower alkoxy, (un)substituted aryl, aryloxy, cycloalkyl, or heterocyclyl; B-R = aryl optionally having OH or lower alkoxy group as a substituent; Y = O, S] or pharmacol. acceptable salts thereof are prepared They have different chemical structures as compared to known Maillard reaction inhibitors and are highly safe and are useful as preventives and remedies for Maillard reaction-related diseases such as diabetes complications and aging and also used in cosmetics and foods. Thus, 5-benzyloxymethyl-3-hydroxymethyl-2-methyl-4-pyridinecarbaldehyde oxime (preparation given) was reduced by Zn powder in AcOH under stirring with ice-cooling for 2 h to give 4-aminomethyl-5-benzyloxymethyl-3-hydroxy-2-methylpyridine (II). In an assay for inhibiting Maillard reaction, II and 4-aminomethyl-3-hydroxy-2-methyl-5-octyloxymethylpyridine inhibited the formation of a protein dimer from lysozyme and fructose in 0.5 M sodium phosphate buffer (pH 7.4) by 46.6 and 93.7%, resp., at 0.2 mM and by 96.3 and 95.6%, resp., at 2 mM.

IT **195442-39-8**

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of hydroxy(aminomethyl)pyridine derivs. as Maillard reaction inhibitors for prevention and treatment)

RN 195442-39-8 CAPLUS

CN Pyridine, 4-(azidomethyl)-5-[[2-[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]ethoxy]methyl]-3-(methoxymethoxy)-2-methyl- (9CI) (CA INDEX NAME)

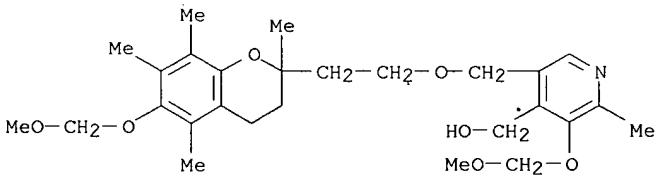


IT **195442-19-4P 195442-20-7P 195442-21-8P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of hydroxy(aminomethyl)pyridine derivs. as Maillard reaction inhibitors for prevention and treatment)

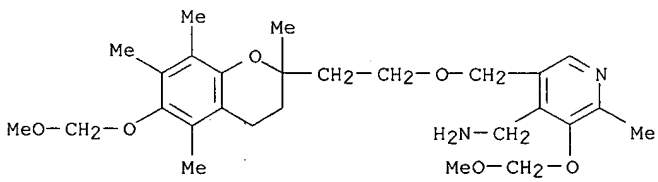
RN 195442-19-4 CAPLUS

CN 4-Pyridinemethanol, 5-[[2-[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]ethoxy]methyl]-3-(methoxymethoxy)-2-methyl- (9CI) (CA INDEX NAME)

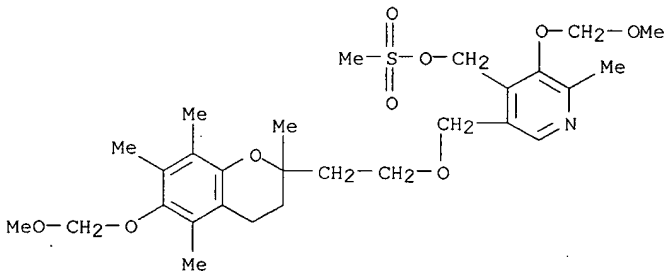


RN 195442-20-7 CAPLUS

CN 4-Pyridinemethanamine, 5-[[2-[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]ethoxy]methyl]-3-(methoxymethoxy)-2-methyl- (9CI) (CA INDEX NAME)



RN 195442-21-8 CAPLUS
CN 4-Pyridinemethanol, 5-[[2-[3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]ethoxy]methyl]-3-(methoxymethoxy)-2-methyl-, methanesulfonate (ester) (9CI) (CA INDEX NAME)



L11 ANSWER 26 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:528056 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 127:230924
TITLE: Synthesis and properties of tocopherol-containing polymeric vesicle systems
AUTHOR(S): Cho, Iwhan; Kim, Young Dae
CORPORATE SOURCE: Department Advanced Materials Engineering, Korea Advanced Institute Science Technology, Seoul, 130, S. Korea
SOURCE: Macromolecular Symposia (1997), 118, 631-640
CODEN: MSYMEC; ISSN: 1022-1360
PUBLISHER: Huethig & Wepf
DOCUMENT TYPE: Journal
LANGUAGE: English

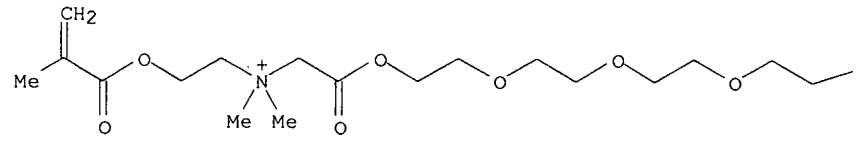
AB Two different tocopherol-containing amphiphilic monomers, {[(tocopheryloxy)carbonyl]-methyl}[2-(methacryloyloxy)ethyl]dimethylammonium chloride and {[(tocopheryloxy)penta(ethoxy)carbonyl]methyl}[2-(methacryloyloxy)ethyl]dimethylammonium chloride, were synthesized and polymerized The formation of polymeric closed vesicles having diams. of 200-5200 Å was confirmed by electron micrographs, entrapment of [14C]sucrose, permeability measurements, and gel filtration. The polymeric vesicles showed reduced permeability and enhanced thermodn. stability. Antioxidative activities were determined by the thiocyanate method confirming that polymeric tocopherols also exhibited significant activities.

IT **195148-33-5P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses)
(synthesis and properties of tocopherol-containing polymeric vesicle systems)

RN 195148-33-5 CAPLUS
CN 3,6,9,12,15-Pentaoxaheptadecan-1-aminium, 17-[[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl]oxy]-N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-2-oxo-, chloride (9CI) (CA INDEX NAME)

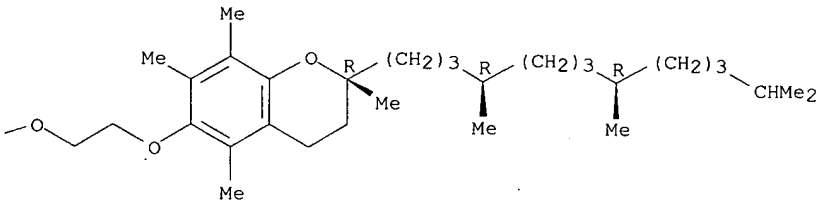
Absolute stereochemistry.

PAGE 1-A



● Cl⁻

PAGE 1-B



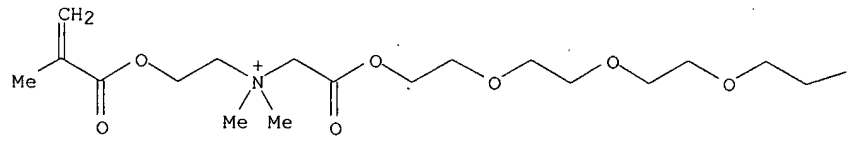
IT **195148-39-1P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis and properties of tocopherol-containing polymeric vesicle systems)
RN 195148-39-1 CAPLUS
CN Ethanaminium, 2-[[14-[[3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl]oxy]-3,6,9,12-tetraoxatetradec-1-yl]oxy]-N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-2-oxo-, chloride, [2R-[2R*(4R*,8R*)]]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 195148-33-5
CMF C49 H86 N O10 . Cl

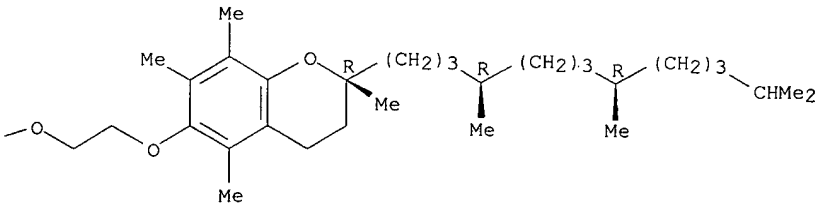
Absolute stereochemistry.

PAGE 1-A



● Cl⁻

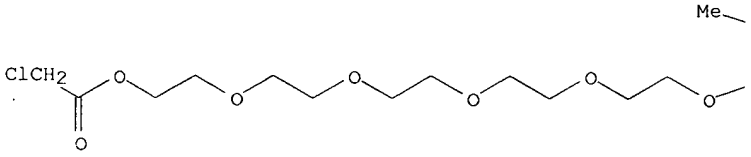
PAGE 1-B



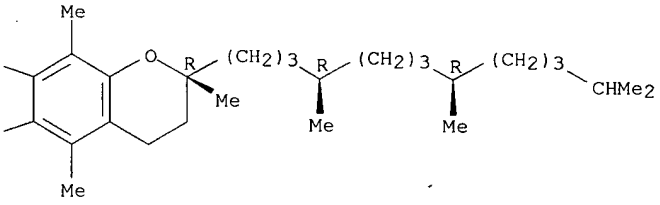
IT **195148-40-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(synthesis and properties of tocopherol-containing polymeric vesicle systems)
RN 195148-40-4 CAPLUS
CN Acetic acid, chloro-, 14-[[3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl]oxy]-3,6,9,12-tetraoxatetradec-1-yl ester, [2R-[2R*(4R*,8R*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L11 ANSWER 27 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:286357 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 126:263933
TITLE: Preparation of substituted 2,2-dimethyl-ω-phenoxyalkanoic acids and esters and their use as hypolipemics and hypocholesteremics and as antioxidants for LDL
INVENTOR(S): Regnier, Gilbert; Guillonneau, Claude; Vilaine, Jean-Paul; Mahlberg, Florence; Breugnot, Christine
PATENT ASSIGNEE(S): Adir Et Compagnie, Fr.
SOURCE: Eur. Pat. Appl., 20 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 763527	A1	19970319	EP 1996-401946	19960912
EP 763527	B1	20000426		

R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE					
FR 2738817	A1	19970321	FR 1995-10731		19950914
FR 2738817	B1	19971017			
CA 2185192	AA	19970315	CA 1996-2185192		19960910
CA 2185192	C	20010417			
AU 9665603	A1	19970320	AU 1996-65603		19960912
AU 707127	B2	19990701			
AT 192143	E	20000515	AT 1996-401946		19960912
PT 763527	T	20000831	PT 1996-401946		19960912
ES 2147907	T3	20001001	ES 1996-401946		19960912
NO 9603839	A	19970317	NO 1996-3839		19960913
NO 306715	B1	19991213			
ZA 9607755	A	19970416	ZA 1996-7755		19960913
CN 1149046	A	19970507	CN 1996-111561		19960913
CN 1064952	B	20010425			
US 5734077	A	19980331	US 1996-713665		19960913
JP 09132547	A2	19970520	JP 1996-244615		19960917
GR 3033760	T3	20001031	GR 2000-401456		20000623
PRIORITY APPLN. INFO.:			FR 1995-10731	A	19950914

OTHER SOURCE(S): MARPAT 126:263933

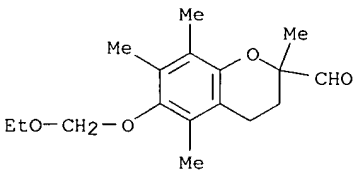
AB The title compds. I [X = O, S, bond; A = bond, hydrocarbon chain; B = hydrocarbon chain; R = H, alkyl; R1, R3 = H; R1R3 = (CH2)n (n = 1, 2); R1 = Me, double bond with A; R2, R6 = H, Me; R4, R5 = alkyl; R7 = H, protecting group; Z = H, halo, alkyl, alkoxy] were prepared and their use as hypolipemics and hypocholesteremics and as antioxidants for LDL studied. E.g., reaction of 4-BrCH2CH2C6H4O(CH2)3CMe2CO2Et and 3,5,4-(Me3C)2(HO)C6H2SH gave the ester, which was hydrolyzed to 3,5,4-(Me3C)2(HO)C6H2SCH2CH2C6H4O(CH2)3CMe2CO2H-4. In protection against oxidation of LDL, I was 10-70 times more effective that the reference compds. probucol and trolox. As hypocholesteremics and hypotriglyceridemics, 6 of the compds. tested were as active as the reference compound bezafibrate.

IT **167213-29-8**

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of dimethylphenoxyalkanoic acids and their use as hypolipemics and hypocholesteremics and as antioxidants for LDL)

RN 167213-29-8 CAPLUS

CN 2H-1-Benzopyran-2-carboxaldehyde, 6-(ethoxymethoxy)-3,4-dihydro-2,5,7,8-tetramethyl- (9CI) (CA INDEX NAME)

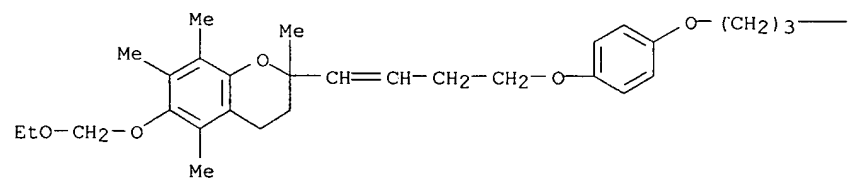


IT **188808-38-0P**

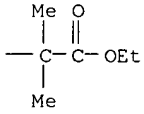
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of dimethylphenoxyalkanoic acids and their use as hypolipemics and hypocholesteremics and as antioxidants for LDL)

RN 188808-38-0 CAPLUS

CN Pentanoic acid, 5-[4-[[4-[6-(ethoxymethoxy)-3,4-dihydro-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]-3-butenyl]oxy]phenoxy]-2,2-dimethyl-, ethyl ester (9CI) (CA INDEX NAME)



PAGE 1-B



L11 ANSWER 28 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:208116 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 126:246813
TITLE: Ionizable congeners of aromatic and aliphatic alcohols as antileukemia agents and cytoprotectants
INVENTOR(S): Fariss, Marc W.
PATENT ASSIGNEE(S): Virginia Commonwealth University, USA
SOURCE: U.S., 54 pp., Cont.-in-part of U.S. Ser. 5,336,485.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5610180	A	19970311	US 1994-286994	19940808
US 5198432	A	19930330	US 1991-678110	19910401
US 5336485	A	19940809	US 1993-28831	19930310

PRIORITY APPLN. INFO.:

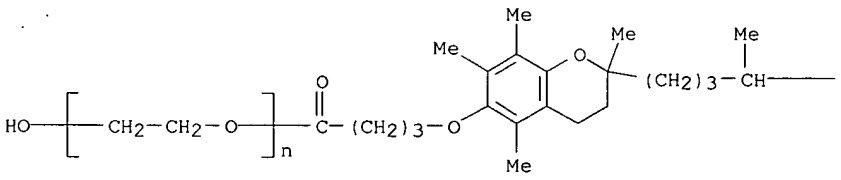
US 1988-149762	B2	19880129
US 1989-316789	B2	19890228
US 1991-678110	A1	19910401
US 1993-28831	A2	19930310
US 1988-149764	B2	19880129

AB Ionizable congeners of aromatic and aliphatic alcs. provide potent cytoprotective properties in vivo and in vitro. α-Tocopherol succinate, cholesteryl succinate, cholesteryl sulfate, dihydrocholesterol succinate, dihydrocholesterol sulfate, and ergosterol analogs are particularly good cytoprotective agents. In addition, the tris salts of these compds. have superior cytoprotective properties. Hepatoprotective activity of compds. of the invention is presented. The compds. may be also used for suppressing or preventing lymphoid or myeloid leukemias. Preparation of selected compds., e.g. α-tocopherol monoglutarate, is described.

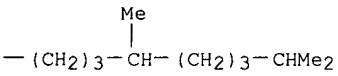
IT **188577-45-9**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(aromatic and aliphatic alc. ionizable congeners for antileukemia agents and cytoprotective agents)

RN 188577-45-9 CAPLUS
CN Poly(oxy-1,2-ethanediyl), α-[4-[[3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl]oxy]-1-oxobutyl]-ω-hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L11 ANSWER 29 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:649797 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 125:275907
TITLE: Preparation of aryloxy(phenylpiperazinyl)propanols with antiallergic activity
INVENTOR(S): Ogata, Kazumi; Sakaue, Takahiro; Ito, Kazuhiko; Nakao, Hidetoshi
PATENT ASSIGNEE(S): Senju Pharmaceutical Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 17 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 735030	A1	19961002	EP 1996-104768	19960326
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CA 2172183	AA	19960930	CA 1996-2172183	19960320
JP 08325241	A2	19961210	JP 1996-67941	19960325
US 5981530	A	19991109	US 1996-622003	19960326

PRIORITY APPLN. INFO.: JP 1995-70985 A 19950329
OTHER SOURCE(S): MARPAT 125:275907

AB Title compds. I [R1 = benzene, naphthalene, quinoline, indole, or chroman that may be substituted by alkyl, alkoxy and/or hydroxy; R2, R3 = H, alkyl] were prepared Thus, 2-BrC6H4CO2Et was treated with N-benzylpiperazine, followed by 2-tert-butyl-4-methoxyphenoxymethyloxirane to give I [R1 = 4,2-MeO(Me3C)C6H3, R2 = H, R3 = Et] which was hydrolyzed to the acid. At 100 mg/kg orally in rats I [R1 = 4,2-MeO(Me3C)C6H3, R2 = R3 = H] gave 54.8% inhibition in the palpebral PCA test, cf. diphenhydramine. HCl 37.6 %.

IT **182628-92-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of aryloxy(phenylpiperazinyl)propanols with antiallergic activity)

RN 182628-92-8 CAPLUS
CN Benzoic acid, 2-[4-[3-[[[3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl]oxy]methoxy]-2-hydroxypropyl]-1-piperazinyl]-, ethyl ester (9CI) (CA INDEX NAME)

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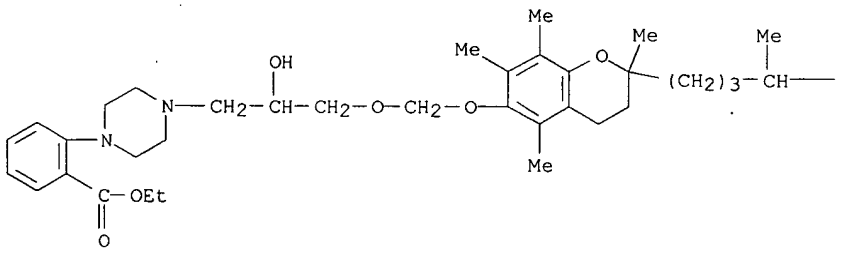

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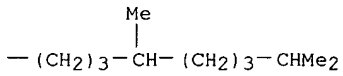

L11 ANSWER 30 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:469711 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 125:113929
TITLE: Formation and utility of sulfonic acid protecting groups for organic synthesis and for improvement of drug bioavailability
INVENTOR(S): Roberts, John C.; Patch, Raymond J.
PATENT ASSIGNEE(S): Procept, Inc., USA
SOURCE: PCT Int. Appl., 43 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9618609	A1	19960620	WO 1995-US15651	19951130
W: CA, JP, MX				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5596095	A	19970121	US 1995-440547	19950512
PRIORITY APPLN. INFO.:			US 1994-353832 A	19941212

OTHER SOURCE(S): MARPAT 125:113929

AB The present invention is a method of protecting a sulfonic acid functional group in an organic mol. as a substituted or unsubstituted neopentyl sulfonate ester. The method allows the conversion of RSO3H to R'SO3H, wherein R and R' are different organic radicals. Also disclosed is a method of increasing the bioavailability of drugs with a sulfonic acid functional group by protecting the sulfonic acid functional group as a substituted neopentyl sulfonate ester which has a masked heteroatom nucleophile. The masked nucleophile can be liberated in vivo, resulting in removal of the neopentyl protecting group and regeneration of the parent drug. Thus, e.g., HOCH2CMe2CH2CH2NHCO2Bu-tert (I; N-BOC-2,2-dimethyl-4-aminobutyl alc. or Neon-B-OH) was prepared as a neopentyl protecting agent containing a masked nucleophilic heteroatom; treatment of RSO2Cl with I afforded RSO2OCH2CMe2CH2CH2NHCO2Bu-tert (II); liberation of the amino group of II with TFA followed by treatment with NH4OH provided RSO3-NH4+ + 3,3-dimethylpyrrolidine in quant. yield.

IT **179419-09-1**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(formation and utility of sulfonic acid protecting groups for organic synthesis and for improvement of drug bioavailability)

RN 179419-09-1 CAPLUS
CN 2-Naphthalenesulfonic acid, 5,5'-[2-[[2-[[3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl]oxy]ethyl]amino]-2-oxoethylidene]bis-, [2R-[2R*(4R*,8R*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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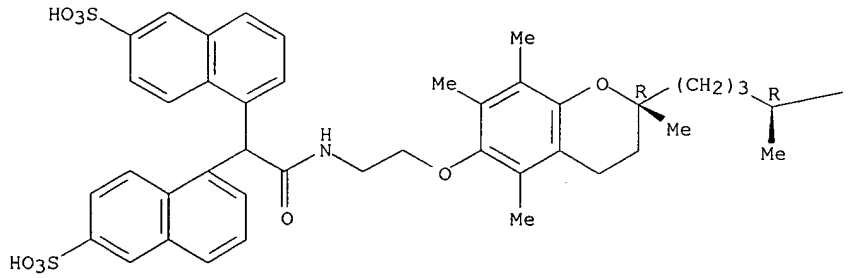
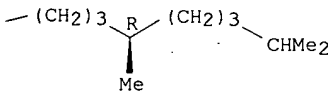




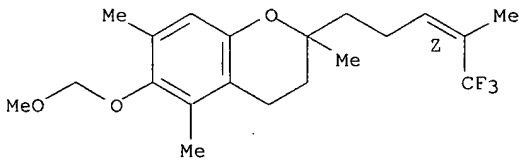
L11 ANSWER 31 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1995:902187 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 124:30061
TITLE: Synthesis of fluorine analogs of vitamin E. IV. Synthesis of bis(trifluoromethyl)tocopherols
AUTHOR(S): Koyama, Mayumi; Takagi, Toshiyuki; Ando, Akira; Kumadaki, Itsumaro
CORPORATE SOURCE: Fac. Pharmaceutical Sci., Setsunan Univ., Osaka, 573-01, Japan
SOURCE: Chemical & Pharmaceutical Bulletin (1995), 43(9), 1466-74
CODEN: CPBTAL; ISSN: 0009-2363
PUBLISHER: Pharmaceutical Society of Japan
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 124:30061

AB Mono(trifluoromethyl)tocopherols, which were used for investigation of the mobility and orientation of tocopherol in liposomes by 19F-NMR were previously synthesized . For more precise investigation of the behavior of vitamin E in liposomes, tocopherols having two trifluoromethyl groups, one on the prenyl side chain and the other on the chromanol ring, were synthesized. Thus, dimethylhydroquinones were treated with 6-chloro-3-methyl-2-hexenol in the presence of zinc chloride to give 2-(3-chloropropyl)trimethylchromanol derivs. These were converted to phosphonium salts, which, upon condensation with trifluoromethylated ketones followed by hydrogenation, gave tocopherols with a trifluoromethyl group on the side chain and a hydrogen on the chromanol part. These were halogenated on the chromanol part and treated with trifluoromethyl iodide and copper powder to give the title compds.

IT **171566-75-9P 171566-76-0P 171566-77-1P**
171566-84-0P 171566-85-1P 171566-86-2P
171566-87-3P 171566-88-4P 171566-89-5P
171566-90-8P 171566-91-9P 171566-92-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of bis(trifluoromethyl)tocopherols)

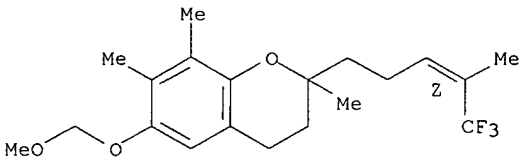
RN 171566-75-9 CAPLUS
CN 2H-1-Benzopyran, 3,4-dihydro-6-(methoxymethoxy)-2,5,7-trimethyl-2-(5,5,5-trifluoro-4-methyl-3-pentenyl)-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



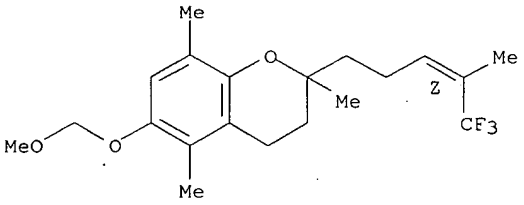
RN 171566-76-0 CAPLUS
CN 2H-1-Benzopyran, 3,4-dihydro-6-(methoxymethoxy)-2,7,8-trimethyl-2-(5,5,5-trifluoro-4-methyl-3-pentenyl)-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



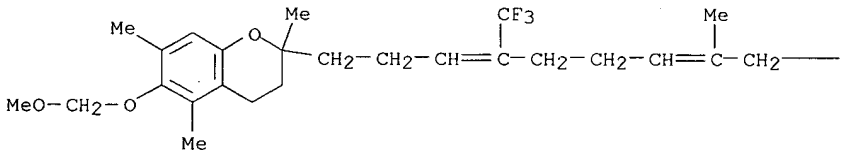
RN 171566-77-1 CAPLUS
CN 2H-1-Benzopyran, 3,4-dihydro-6-(methoxymethoxy)-2,5,8-trimethyl-2-(5,5,5-trifluoro-4-methyl-3-pentenyl)-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

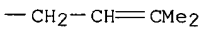


RN 171566-84-0 CAPLUS
CN 2H-1-Benzopyran, 2-[8,12-dimethyl-4-(trifluoromethyl)-3,7,11-tridecatrienyl]-3,4-dihydro-6-(methoxymethoxy)-2,5,7-trimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



RN 171566-85-1 CAPLUS
CN 2H-1-Benzopyran, 2-[4,12-dimethyl-8-(trifluoromethyl)-3,7,11-tridecatrienyl]-3,4-dihydro-6-(methoxymethoxy)-2,5,7-trimethyl- (9CI) (CA INDEX NAME)

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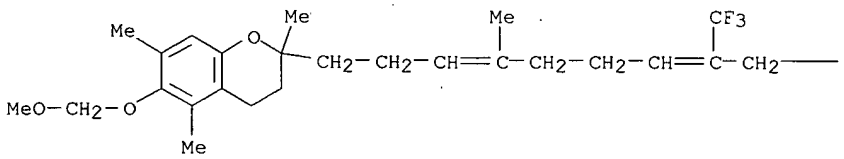
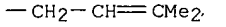
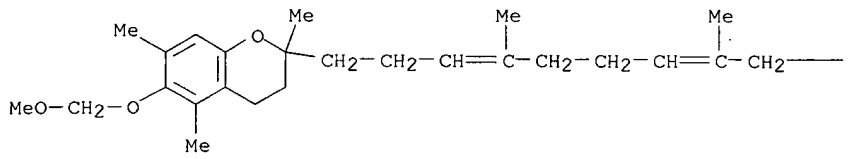


PAGE 1-B



RN 171566-86-2 CAPLUS
CN 2H-1-Benzopyran, 2-[4,8-dimethyl-12-(trifluoromethyl)-3,7,11-tridecatrienyl]-3,4-dihydro-6-(methoxymethoxy)-2,5,7-trimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



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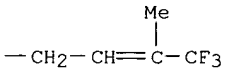
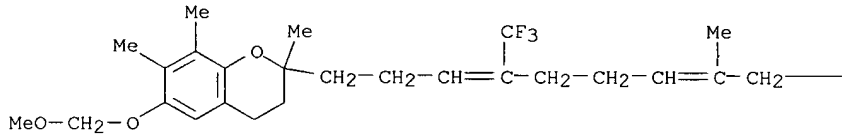
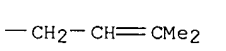


RN 171566-87-3 CAPLUS
CN 2H-1-Benzopyran, 2-[8,12-dimethyl-4-(trifluoromethyl)-3,7,11-tridecatrienyl]-3,4-dihydro-6-(methoxymethoxy)-2,7,8-trimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A

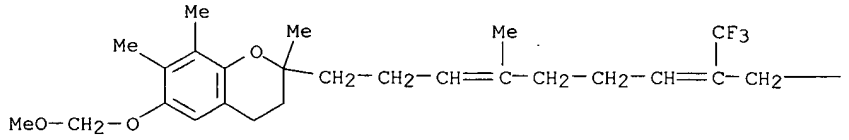


PAGE 1-B



RN 171566-88-4 CAPLUS
CN 2H-1-Benzopyran, 2-[4,12-dimethyl-8-(trifluoromethyl)-3,7,11-tridecatrienyl]-3,4-dihydro-6-(methoxymethoxy)-2,7,8-trimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



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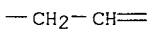
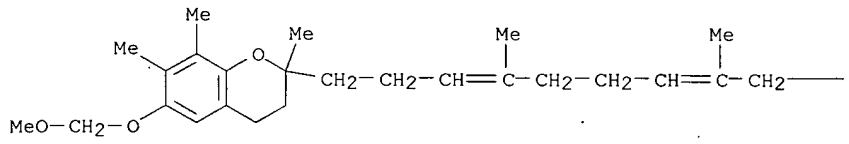


RN 171566-89-5 CAPLUS
CN 2H-1-Benzopyran, 3,4-dihydro-6-(methoxymethoxy)-2,7,8-trimethyl-2-(13,13,13-trifluoro-4,8,12-trimethyl-3,7,11-tridecatrienyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



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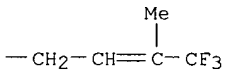
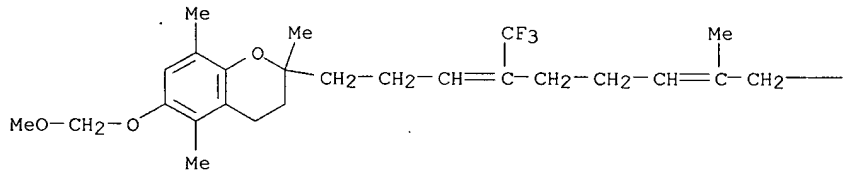


RN 171566-90-8 CAPLUS
CN 2H-1-Benzopyran, 2-[8,12-dimethyl-4-(trifluoromethyl)-3,7,11-tridecatrienyl]-3,4-dihydro-6-(methoxymethoxy)-2,5,8-trimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



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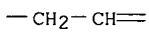
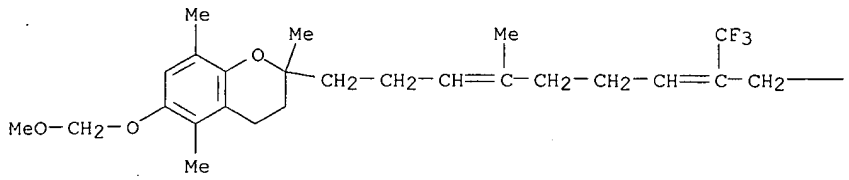


RN 171566-91-9 CAPLUS
CN 2H-1-Benzopyran, 2-[4,12-dimethyl-8-(trifluoromethyl)-3,7,11-tridecatrienyl]-3,4-dihydro-6-(methoxymethoxy)-2,5,8-trimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



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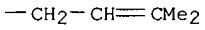
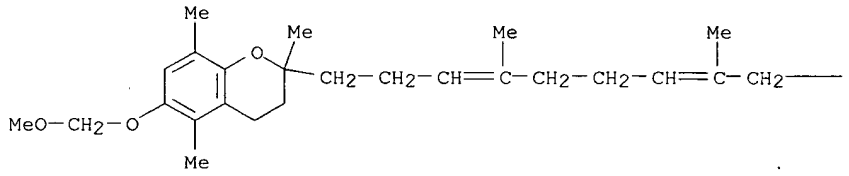
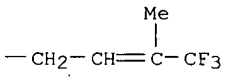


RN 171566-92-0 CAPLUS
CN 2H-1-Benzopyran, 3,4-dihydro-6-(methoxymethoxy)-2,5,8-trimethyl-2-(13,13,13-trifluoro-4,8,12-trimethyl-3,7,11-tridecatrienyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L11 ANSWER 32 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1995:787156 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 123:198785
TITLE: Preparation of thiazolidine derivatives with aldose reductase-inhibitory activity
INVENTOR(S): Yoshioka, Takao; Kitazawa, Eiichi; Kurumada, Tomoyuki; Fujita, Takeshi; Kanai, Tsutomu; Yamazaki, Mitsuo; Hasegawa, Kazuo; Horikoshi, Hiroyoshi
PATENT ASSIGNEE(S): Sankyo Co, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 187 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07002852	A2	19950106	JP 1994-994	19940110
JP 08002900	B4	19960117		
PRIORITY APPLN. INFO.:			JP 1994-994	19940110

OTHER SOURCE(S): MARPAT 123:198785
AB The title compds. [I; R1 = H, (un)substituted aralkyl or cycloalkyl; R2, R6, R7 = H, alkyl; R3 = H, HO-protecting group; R4 = H, alkyl,

(un)substituted aralkyl, cycloalkyl, or aryl, alkoxy; R5 = H, alkyl, alkoxy; R8 = H, (un)substituted alkyl; R9 = (un)substituted alkyl; Ar = (un)substituted bivalent aromatic or heterocyclic group; W = CH2, CO, CH(OR3a), N(OV), N(R3b); wherein R3a = H, HO-protecting group; V = H, (un)substituted alkyl or aralkyl; R3b = HO-protecting in R3a or R3b and U together form a double bond; U = single bond, CH2; or U and W together form a double bond; n = 1-10 integer; Y = O, NH; Z = O, NH; when W is CH2, Z may be S], which also have activities for improving the metabolism of blood lipid and sugar and are useful for the treatment of hyperlipidemia, diabetes, and diabetes complications (no data), are prepared Thus, a mixture of 2.1 g Et 3-[4-(6-acetoxy-5,7,8-trimethyl-2-octylchroman-2-ylmethoxy)phenyl]-2-chloropropionate, 0.35 g thiourea, and 2.5 mL sulfolane was heated at 120-130° for 7 h to give a 2,4-thiazolidinedione derivative (II; R = H), which was alkylated by tert-Bu bromoacetate in the presence of K2CO3 in acetone at room temperature for 22 h to give a title compound II (R = CH2CO2CMe3).

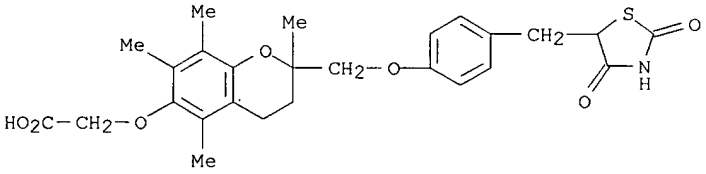
IT **167630-28-6P 167630-37-7P 167630-38-8P 167630-40-2P 167630-46-8P 167630-47-9P 167630-49-1P 167630-50-4P 167630-51-5P 167630-52-6P 167630-56-0P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate for preparation of [[(chromanylalkoxy)heterocyclyl and -aryl]alkyl]thiazolidinedione derivs. as aldose reductase inhibitors)

RN 167630-28-6 CAPLUS

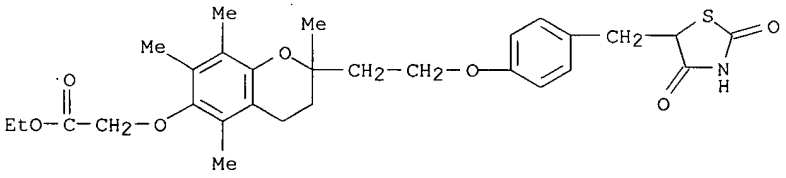
CN Acetic acid, [[2-[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenoxy]methyl]-3,4-dihydro-2,5,7,8-tetramethyl-2H-1-benzopyran-6-yl]oxy]-, monosodium salt (9CI) (CA INDEX NAME)



● Na

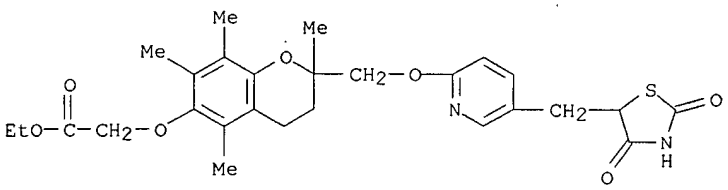
RN 167630-37-7 CAPLUS

CN Acetic acid, [[2-[2-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenoxy]ethyl]-3,4-dihydro-2,5,7,8-tetramethyl-2H-1-benzopyran-6-yl]oxy]-, ethyl ester (9CI) (CA INDEX NAME)

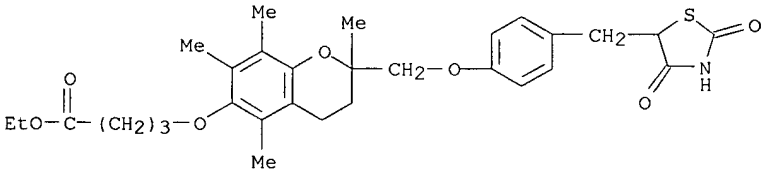


RN 167630-38-8 CAPLUS

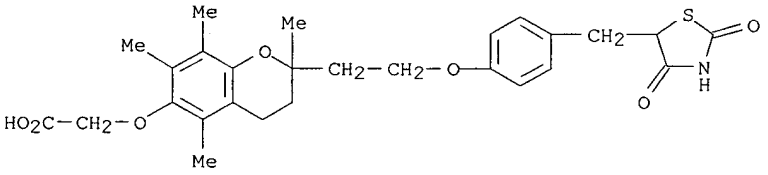
CN Acetic acid, [[2-[[[5-[(2,4-dioxo-5-thiazolidinyl)methyl]-2-pyridinyl]oxy]methyl]-3,4-dihydro-2,5,7,8-tetramethyl-2H-1-benzopyran-6-yl]oxy]-, ethyl ester (9CI) (CA INDEX NAME)



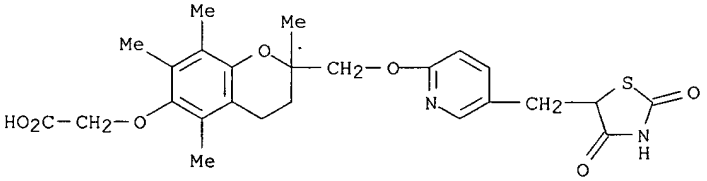
RN 167630-40-2 CAPLUS
CN Butanoic acid, 4-[[2-[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenoxy]methyl]-3,4-dihydro-2,5,7,8-tetramethyl-2H-1-benzopyran-6-yl]oxy]-, ethyl ester (9CI) (CA INDEX NAME)



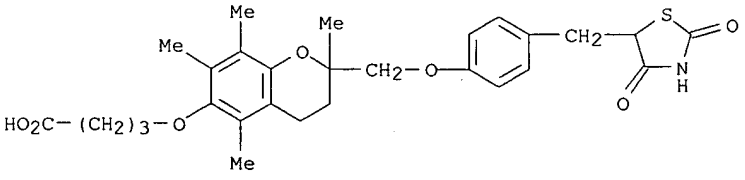
RN 167630-46-8 CAPLUS
CN Acetic acid, [[2-[2-[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenoxy]ethyl]-3,4-dihydro-2,5,7,8-tetramethyl-2H-1-benzopyran-6-yl]oxy]- (9CI) (CA INDEX NAME)



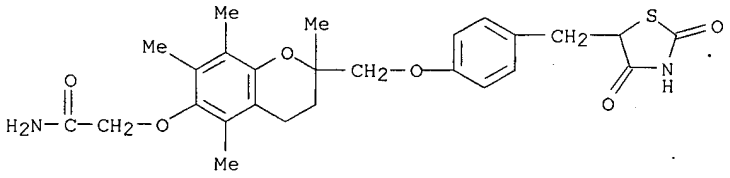
RN 167630-47-9 CAPLUS
CN Acetic acid, [[2-[[[5-[(2,4-dioxo-5-thiazolidinyl)methyl]-2-pyridinyl]oxy]methyl]-3,4-dihydro-2,5,7,8-tetramethyl-2H-1-benzopyran-6-yl]oxy]- (9CI) (CA INDEX NAME)



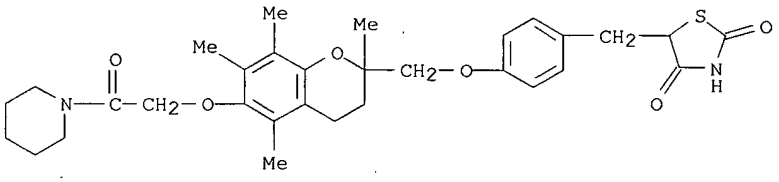
RN 167630-49-1 CAPLUS
CN Butanoic acid, 4-[[2-[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenoxy]methyl]-3,4-dihydro-2,5,7,8-tetramethyl-2H-1-benzopyran-6-yl]oxy]- (9CI) (CA INDEX NAME)



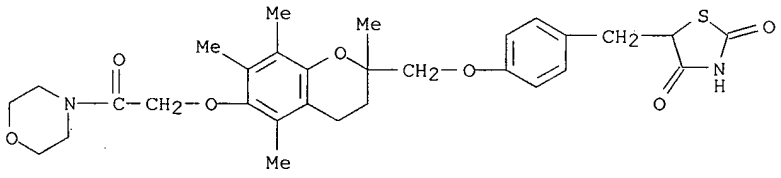
RN 167630-50-4 CAPLUS
CN Acetamide, 2-[[2-[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenoxy]methyl]-3,4-dihydro-2,5,7,8-tetramethyl-2H-1-benzopyran-6-yl]oxy]- (9CI) (CA INDEX NAME)



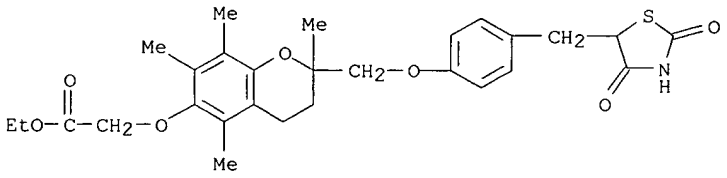
RN 167630-51-5 CAPLUS
CN Piperidine, 1-[[[2-[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenoxy]methyl]-3,4-dihydro-2,5,7,8-tetramethyl-2H-1-benzopyran-6-yl]oxy]acetyl]- (9CI) (CA INDEX NAME)



RN 167630-52-6 CAPLUS
CN Morpholine, 4-[[[2-[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenoxy]methyl]-3,4-dihydro-2,5,7,8-tetramethyl-2H-1-benzopyran-6-yl]oxy]acetyl]- (9CI) (CA INDEX NAME)



RN 167630-56-0 CAPLUS
CN Acetic acid, [[2-[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenoxy]methyl]-3,4-dihydro-2,5,7,8-tetramethyl-2H-1-benzopyran-6-yl]oxy]-, ethyl ester (9CI) (CA INDEX NAME)



L11 ANSWER 33 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1995:767387 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 123:169349
TITLE: Preparation of anticholesteremic, antihyperlipidemic and antiatherosclerotic substituted (phenoxy)isobutyric acids and esters.
INVENTOR(S): Regnier, Gilbert; Guillonneau, Claude; Vilaine,

Jean-Paul; Lenaers, Albert; Breugnot, Christine
PATENT ASSIGNEE(S): Adir et Cie., Fr.
SOURCE: Eur. Pat. Appl., 33 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 621255	A1	19941026	EP 1994-400845	19940419
EP 621255	B1	19970820		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
FR 2704224	A1	19941028	FR 1993-4606	19930420
FR 2704224	B1	19950825		
CA 2121571	AA	19941021	CA 1994-2121571	19940418
CA 2121571	C	20000801		
AU 9460533	A1	19941027	AU 1994-60533	19940418
AU 667266	B2	19960314		
US 5512595	A	19960430	US 1994-230143	19940419
AT 157077	E	19970915	AT 1994-400845	19940419
ES 2105549	T3	19971016	ES 1994-400845	19940419
JP 06340580	A2	19941213	JP 1994-81869	19940420
JP 2885639	B2	19990426		
ZA 9402728	A	19950209	ZA 1994-2728	19940420
US 5627205	A	19970506	US 1995-510857	19950803

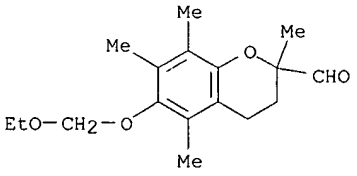
PRIORITY APPLN. INFO.: FR 1993-4606 A 19930420
US 1994-230143 A3 19940419

OTHER SOURCE(S): MARPAT 123:169349

AB The title compds. [I; A = direct bond, (un)substituted (un)branched C1-9 divalent hydrocarbyl, etc.; R = H, (un)branched (un)substituted C1-6 alkyl; R1= H, Me; R2, R6 = H, Me; R4, R5 = (un)branched C1-6 alkyl; R7 = H, Ac, EtOCH2, PhCH2; X = O, direct bond; Z = H, halogen, alkyl, alkoxy; R1R3 = (CH2)n; n = 1, 2; etc.], useful as anticholesteremics, antihyperlipidemics, and antiatherosclerotics, are prepared Thus, 2-[4-[2-(3,5-di-tert-butyl-4-hydroxyphenylthio)ethyl]phenoxy]isobutyric acid was prepared from 4-hydroxy-3,5-di-tert-butylphenylthiol and demonstrated a IC50 against the peroxidn. of human LDL by endothelial cells of 3 x 10-9 M.

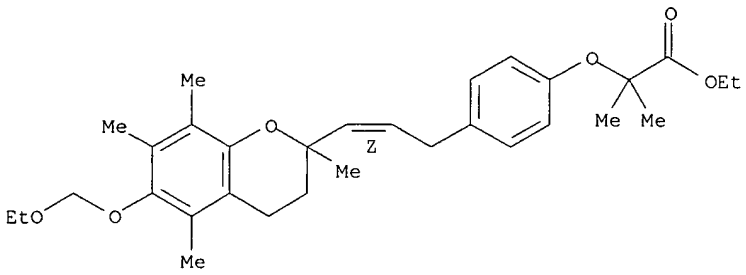
IT **167213-29-8** **167213-30-1**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of anticholesteremic, antihyperlipidemic and antiatherosclerotic substituted (phenoxy)isobutyric acids and esters)

RN 167213-29-8 CAPLUS
CN 2H-1-Benzopyran-2-carboxaldehyde, 6-(ethoxymethoxy)-3,4-dihydro-2,5,7,8-tetramethyl- (9CI) (CA INDEX NAME)

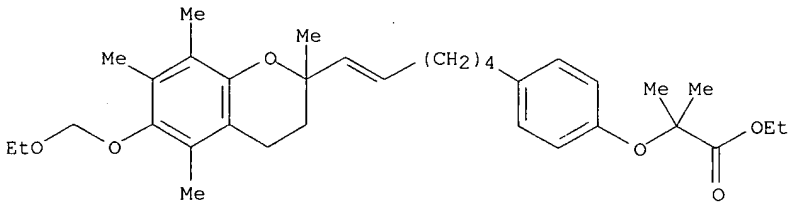


RN 167213-30-1 CAPLUS
CN Propanoic acid, 2-[4-[3-[6-(ethoxymethoxy)-3,4-dihydro-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]-2-propenyl]phenoxy]-2-methyl-, ethyl ester, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



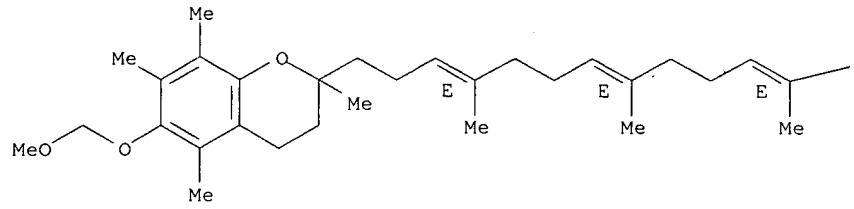
IT **167213-33-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of anticholesteremic, antihyperlipidemic and antiatherosclerotic substituted (phenoxy)isobutyric acids and esters)
RN 167213-33-4 CAPLUS
CN Propanoic acid, 2-[4-[6-[6-(ethoxymethoxy)-3,4-dihydro-2,5,7,8-tetramethyl-2H-1-benzopyran-2-yl]-5-hexenyl]phenoxy]-2-methyl-, ethyl ester (9CI) (CA INDEX NAME)



L11 ANSWER 34 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1995:439562 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 122:265699
TITLE: Synthesis of fluorine analogs of vitamin E. III. Synthesis of 2-[4,8-dimethyl-12-(trifluoromethyl)tridecyl]-2,5,7,8-tetramethyl-6-chromanol and 2-[4,12-dimethyl-8-(trifluoromethyl)tridecyl]-2,5,7,8-tetramethyl-6-chromanol
AUTHOR(S): Koyama, Mayumi; Tamura, Mihoko; Ando, Akira; Kumadaki, Itsumaro
CORPORATE SOURCE: Faculty Pharmaceutical Sciences, Setsunan University, Osaka, 573-01, Japan
SOURCE: Chemical & Pharmaceutical Bulletin (1994), 42(10), 2154-6
CODEN: CPBTAL; ISSN: 0009-2363
PUBLISHER: Pharmaceutical Society of Japan
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 122:265699
AB 2-[4,8-Dimethyl-12-(trifluoromethyl)tridecyl]-2,5,7,8-tetramethyl-6-chromanol and 2-[4,12-dimethyl-8-(trifluoromethyl)tridecyl]-2,5,6,8-tetramethyl-6-chromanol, were synthesized by means of the Wittig reaction using the phosphonium salt of 2-(3-chloropropyl)-2,5,7,8-tetramethyl-6-chromanol.
IT **162827-17-0P 162827-18-1P 162827-19-2P 162827-21-6P 162827-22-7P 162827-23-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of tridecyltetramethylchromanols)
RN 162827-17-0 CAPLUS
CN 2H-1-Benzopyran, 3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2-(13,13,13-trifluoro-4,8,12-trimethyl-3,7,11-tridecatrienyl)-, (E,E,E)-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

PAGE 1-A

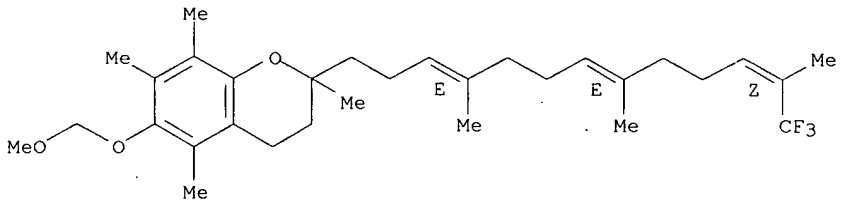


PAGE 1-B

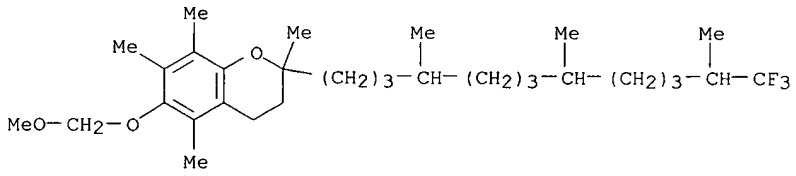
—CF_3

RN 162827-18-1 CAPLUS
CN 2H-1-Benzopyran, 3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2-(13,13,13-trifluoro-4,8,12-trimethyl-3,7,11-tridecatrienyl)-, (Z,E,E)-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

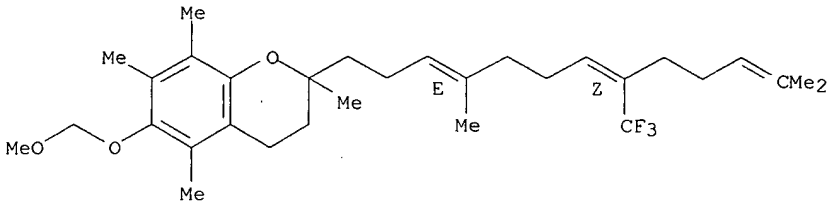


RN 162827-19-2 CAPLUS
CN 2H-1-Benzopyran, 3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-2-(13,13,13-trifluoro-4,8,12-trimethyltridecyl)- (9CI) (CA INDEX NAME)



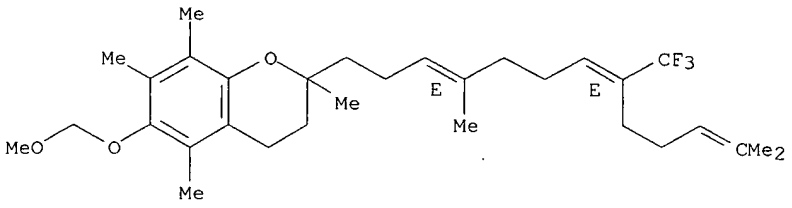
RN 162827-21-6 CAPLUS
CN 2H-1-Benzopyran, 2-[4,12-dimethyl-8-(trifluoromethyl)-3,7,11-tridecatrienyl]-3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-, (Z,E,E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

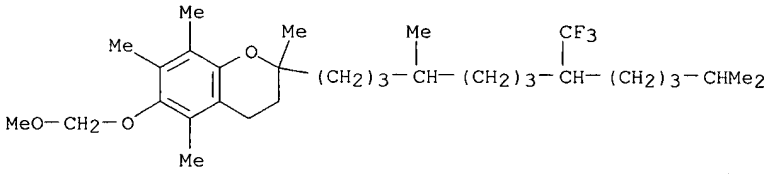


RN 162827-22-7 CAPLUS
CN 2H-1-Benzopyran, 2-[4,12-dimethyl-8-(trifluoromethyl)-3,7,11-tridecatrienyl]-3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl-, (E,E,E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 162827-23-8 CAPLUS
CN 2H-1-Benzopyran, 2-[4,12-dimethyl-8-(trifluoromethyl)tridecyl]-3,4-dihydro-6-(methoxymethoxy)-2,5,7,8-tetramethyl- (9CI) (CA INDEX NAME)



L11 ANSWER 35 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1994:707991 CAPLUS <<LOGINID::20061025>>
DOCUMENT NUMBER: 121:307991
TITLE: Cosmetic compositions containing quaternary ammonium derivatives of vitamin E
INVENTOR(S): Kim, Young Dea
PATENT ASSIGNEE(S): Pacific Chemical Co. Ltd., S. Korea
SOURCE: Fr. Demande, 30 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2701478	A1	19940819	FR 1993-1673	19930215
FR 2701478	B1	19951013		
PRIORITY APPLN. INFO.:			FR 1993-1673	19930215

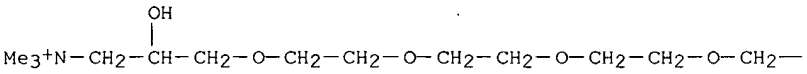
OTHER SOURCE(S): MARPAT 121:307991
AB Cosmetic compns. containing quaternary ammonium derivs. of vitamin E are prepared This compds. have good dispersibility in water and can be used as surfactants. Polyoxyethylene vitamin E in isopropanol was heated with a 70% solution of 2,3-epoxypropyl trimethylammonium chloride at 55-60° for 8 h to obtain quaternary ammonium derivs. of vitamin E which was purified and separated The surface tension of the above compound was 58.9 as

compared to 37.5 dyne/cm for polyoxyethylene cholesterol.

IT **159189-95-4P 159189-96-5P 159189-97-6P**
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(cosmetic compns. containing quaternary ammonium derivs. of vitamin E)

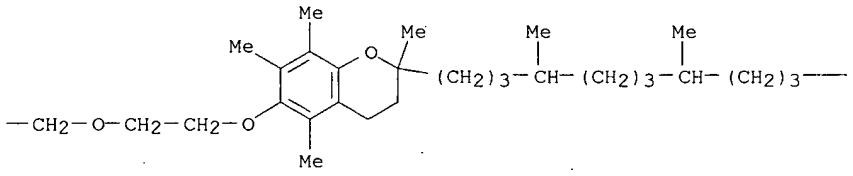
RN 159189-95-4 CAPLUS
CN 3,6,9,12,15-Pentaoxaoctadecan-18-aminium, 1-[[3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl]oxy]-17-hydroxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

PAGE 1-A



● Cl^-

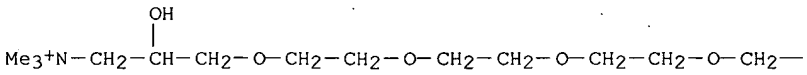
PAGE 1-B



PAGE 1-C

RN 159189-96-5 CAPLUS
CN 3,6,9,12,15,18,21,24-Octaoxaheptacosan-27-aminium, 1-[[3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl]oxy]-26-hydroxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

PAGE 1-A



● Cl^-

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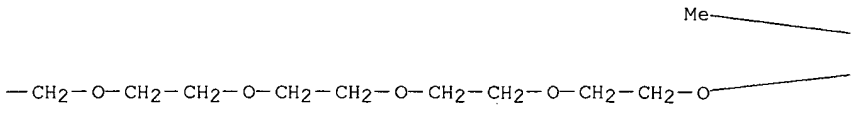

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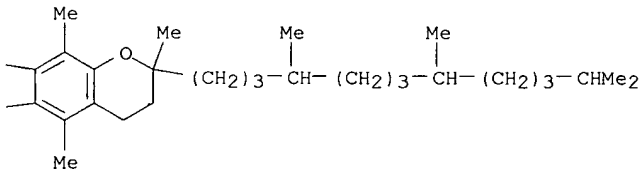

RN 159189-97-6 CAPLUS
CN Poly(oxy-1,2-ethanediyl), α-[3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl]-ω-[2-hydroxy-3-(trimethylammonio)propoxy]-, chloride (9CI) (CA INDEX NAME)

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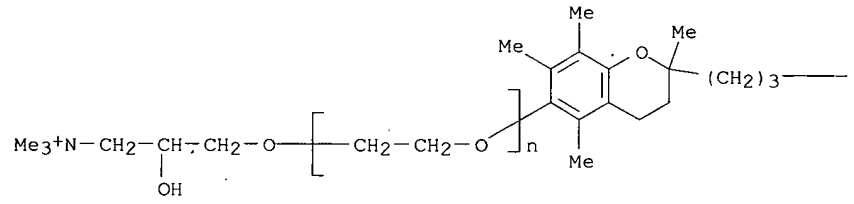

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